JUST WHEN YOU THOUGHT IT WAS SAFE: SON OF Y2K BUG

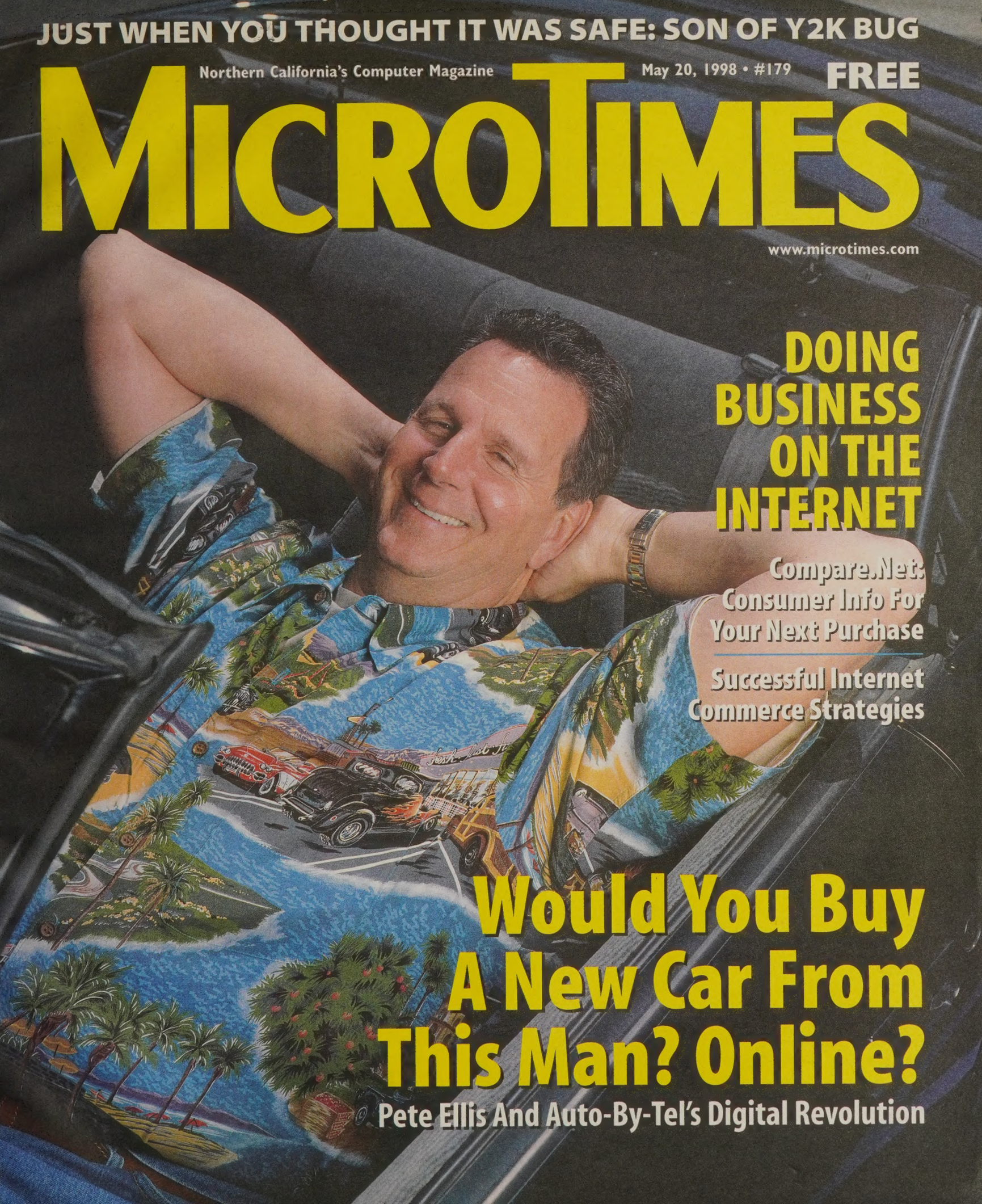
Northern California's Computer Magazine

May 20, 1998 • #179

FREE

MICROTIMES

www.microtimes.com



DOING BUSINESS ON THE INTERNET

Compare.Net: Consumer Info For Your Next Purchase

Successful Internet Commerce Strategies

Would You Buy A New Car From This Man? Online?

Pete Ellis And Auto-By-Tel's Digital Revolution

Supercom...Commitment to Local Customer Support!!

- *Local Will Call*
- *Local Tech Support*
- *Local RMA*

MMX™ intel inside pentium® II PROCESSOR

Supercom is your *local* PC components distributor and manufacturer of custom computer systems.

TOUCH 400 Series Systems

Featuring Intel® Pentium® Processors with MMX™ Technology

TOUCH 500 Series Systems

Featuring Intel Pentium II Processors

TOUCH 600 Series Systems

Featuring Intel Pentium II Processors

TOUCH Enterprise Systems

Server Solutions, we built ours, let us build yours!

- Atlanta, GA
- Boston, MA
- Buffalo, NY
- Chicago, IL
- Cleveland, OH
- Columbus, OH
- Dallas, TX
- Denver, CO
- Houston, TX
- Kansas City, KS
- Miami, FL
- Minneapolis, MN
- Edison, NJ
- Phoenix, AZ
- Pittsburgh, PA
- Portland, OR
- San Antonio, TX
- San Diego, CA
- San Jose, CA
- Salt Lake City, UT
- Seattle, WA
- Vienna, VA
- Toronto
- Vancouver
- Montreal
- London, England
- Beijing, China

...and growing!

Call your local Supercom office at

1-800-888-1888

www.supercom.com

ISO 9002 Certified

Supercom

The Intel Inside Logo and Pentium logos are registered trademarks and MMX is a trademark of Intel Corporation. All other product and company names are the trademarks or registered trademarks of their respective companies.

Because it is so

Easy to use ...

the Sceptre® Dragon Eye™ is

Easy to choose!

D97A

19-inch (18-inch viewable) CRT flat square monitor with AR/ASC
.22mm (horizontal) dot pitch, 1600 x 1200 resolution @ 75 Hz.
Sceptre's ARRC (Advanced Response Rotational Control)
Advanced Elliptical Aperture Multistep Dynamic Focus
Five year limited warranty
Auto Anti-Astigmatism
Optional USB

May 1998

COMPUTER PAPER Editor's CHOICE

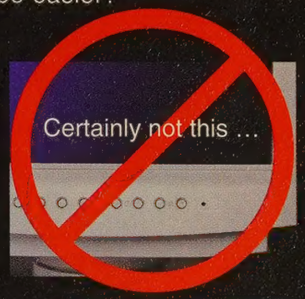
Sceptre Dragon Eye
D54 15" CRT Monitor

Full line — 15 to 19-inch
Optional speakers — 15 and 17-inch
Optional USB — all models
Five year limited warranty — all models
Sceptre's ARRC™ — all models
Advanced Elliptical Aperture Multistep
Dynamic Focus — all models
Auto Anti-Astigmatism — all models

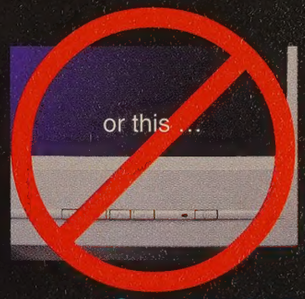
For more information:
WWW.SCEPTRE.COM

Visit Sceptre's Booth
At PC Expo, Booth # 2954 June 16-18, 1998. At Comdex Canada, Booth # 830 July, 8-10, 1998

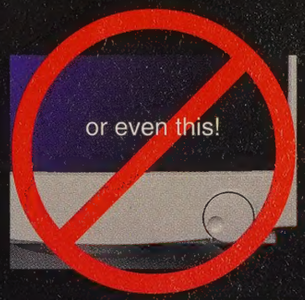
When it comes to managing complex technology, easier is better. The Dragon Eye™ by Sceptre® has the revolutionary ARRC™ interface. Just two controls: one for selection, one for adjustment. What could be easier?



Old-style technology
Too many buttons
Not user friendly



Same story here
as above



Overly simplified
More difficult to use
More prone to error

Sceptre's design ethos is appreciated by those who know. The ultra-high performance19-inch D97A was a Comdex award winner. Compare for yourself and you will see why! Call 888-580-5588 now for a dealer near you.

SCEPTRE®

EXCELLENCE FOR ALL THE WORLD TO SEE

Check This Out.

CyberVision™ has Added Two More Displays to the C-Series.

INTRODUCING THE FEATURE-PACKED C-SERIES.

The CyberVision C-Series is now comprised of 14"-21" (various viewable) displays. The C-Series offers resolutions as high as 1600 x 1200 and diagonal dot pitches as sharp as .25mm to ensure precise, uniform images. Every display is digitally controlled allowing you to optimize the screen for your specific viewing environment and comes with an anti-static, anti-glare treatment that enhances picture quality. And, to ensure you get optimum resolutions and refresh rates all CyberVision displays are Plug & Play compatible. When you ask for a CyberVision C-Series display you'll be asking for the best value for your money.

RELIABILITY AND HASSLE-FREE OWNERSHIP™

Stringent engineering measures ensure that when you buy a CyberVision display it will provide superior reliability. With our commitment to ensuring you enjoy Hassle-free Ownership™, we support every display with a limited three-year warranty. Additionally, we offer you our optional CyberVision Priority Replacement™ program which would deliver a replacement display to you within 48 hours†. We have a technical support department which is comprised of engineers who are standing by to answer your technical questions, and we have a dedicated customer service force to help with all of your other CyberVision display needs.

ASK YOUR DEALER FOR CYBERVISION™

With our commitment to quality, value and service, it's the smart choice to have a CyberVision display bundled with your system. Ask your dealer to upgrade your system to CyberVision.

CYBERVISION™

INTRODUCING THE C-SERIES!

Feature	C40	C50	C52	C70	C72	C92	C112
Screen Size (viewable)	14" (13.2" v)	15" (13.8" v)	15" (13.8" v)	17" (16.0" v)	17" (15.6"v)	19" (18.0" v)	21" (19.5"v)
Dot Pitch	.28mm	.28mm	.28mm	.27mm	.25mm	.26mm	.26mm
Maximum Resolution	1024x768	1024x768	1280x1024	1280x1024	1280x1024	1600x1200	1600x1200
Refresh Rate/Resolution	80Hz/800x600	85Hz/800x600	87Hz/1024x7688	7Hz/1024x768	87Hz /1024x768	79Hz/1280x1024	88Hz /1280x1024
Low Radiation	Low	MPR-II	MPR-II	MPR-II	MPR-II	TCO'92	TCO'92
OSD	No	No	Yes	Yes	Yes	Yes	Yes

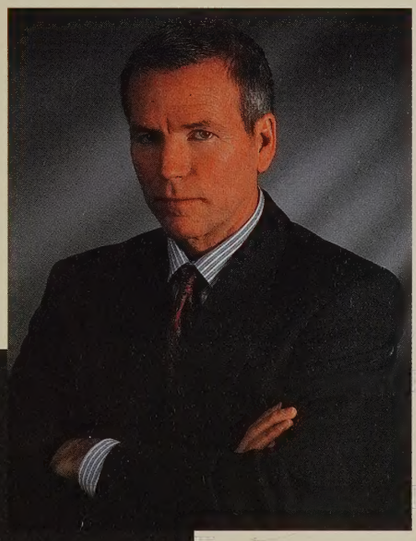
Call us today at 1-(888)57-CYBER, or visit our web-site at www.cybervisiondisplays.com for information on where to purchase your CyberVision display.

CELEBRATING 60 March of Dimes

CyberVision is proud to be a supporter of March of Dimes.

Copyright©1998 CyberVision. All rights reserved. Corporate names and trademarks stated herein are the property of their respective companies. Specifications subject to change without notice.
†Credit Card required to have a replacement unit shipped to you if your original unit needs servicing.

Have you PURCHASED any ILLEGAL SOFTWARE lately?



We have.

Microsoft has sued the following companies alleging that each has distributed counterfeit Microsoft products to undercover investigators:

- ▲ **Silicon Computers,** San Francisco, CA
- ▲ **Gogate International, inc.,** Fremont, CA
- ▲ **CHL Microsystems, Inc.,** Milpitas, CA
- ▲ **Meladi Electronics, Inc.,** Fremont, CA
- ▲ **CMOS Technologies, Inc.,** Santa Clara, CA
- ▲ **Advanced Digital Solutions International, Inc.,** Milpitas, CA

Make no mistake about it. Microsoft is very serious about going after software piracy and leveling the playing field for honest system builders. In fact, based on the results of ongoing test purchases, we've sent out close to 1,000 Cease & Desist letters this year, often followed by legal action. The list of lawsuits at left is proof of our commitment.

The consequences of trafficking in counterfeit goods are real:

***Civil Damages:** Up to $1 million per incident*

Criminal Prosecution:

Individuals: Up to ten years and $2 million

Companies: Up to ten years and $5 million

The combined resources of Microsoft, the Business Software Alliance, and law enforcement agencies are behind this industry-wide effort.

If you're a system builder, be sure to protect yourself by obtaining Microsoft® OEM products from the authorized distributors listed below. If you're concerned about the legitimacy of your software, call 1-800-RU-LEGIT, e-mail piracy@microsoft.com, or visit our website at: www.microsoft.com/piracy/.

BSA Business Software Alliance

System Builders, please call 1-800-325-1233 to receive your FREE System Builder Program introduction pack.

Here are the authorized distributors for Microsoft software, your only assured source of genuine Microsoft products.

AMAX
(800) 800-6328 (U.S.)
(888) 228-2629 (Canada)

ASI
(800) 2000-ASI (U.S.)
(905) 470-1000 (Canada)

COMSTOR Innovative Distribution Services
(800) COMSTOR

D&H
(800) 340-1001 (U.S.)
(800) 340-1001 (Canada)

GATES/ARROW DISTRIBUTING
(800) 332-2222 (U.S.)
(800) 463-5562 (Canada East)
(800) 465-0699 (Canada West)

INGRAM MICRO
(800) 456-8000 (U.S.)
(800) 668-3450 (Canada)

KTX TECHNOLOGY
(888) 425-3343 (U.S.)
(888) 425-3343 (Canada)

MERISEL
(800) MERISEL (U.S.)
(800) MERISEL (Canada)

QDI
(510) 668-4933 (U.S.)
(905) 940-3827 (Canada)

REYES
(800) 968-6635 (U.S.)

(800) 745-7700 (U.S.)

SOFTQUAD
(800) 661-6760 (U.S.)

SYNNEX
(800) 756-9888 (U.S.)

Tech Data CORPORATION
(800) 237-8931 (U.S.)
(800) 668-5588 (Canada)

Microsoft®

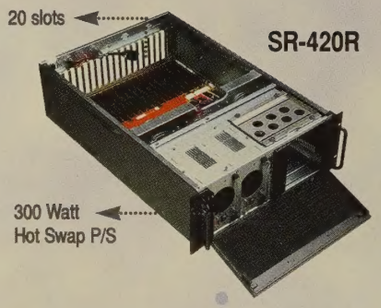
©1998 Microsoft Corporation. All rights reserved. Microsoft is a registered trademark of Microsoft Corporation. All other logos and names are property of their respective companies.

Siliconrax

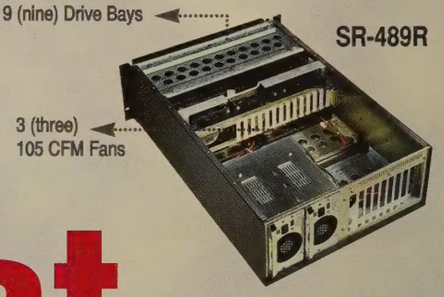
Industrial Computer Specialists

Completely Configured Systems ◆ Rackmount Systems Enclosures
NEMA 4/12 Industrial Workstations ◆ Monitors & Monitor Enclosures
Keyboard & Keyboard Enclosures ◆ Single Board Computers ◆ Passive Backplanes

SR-5930



SR-420R



SR-489R

What do you want... in your system ?

RAID Fault Tolerant File Server
for CTI, Networking, ISP Application

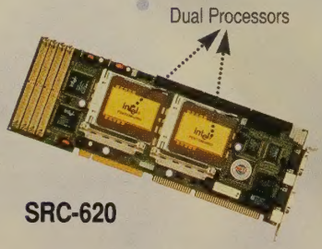
We customize your systems & chassis to suit your requirements & budget!

Chassis

- Supports standard motherboard/ATX
- 8-20 slot Backplane
- Supports up to 9 drive bays (5.25")
  w/ single or Hot Swap Power Supply
- Designed to meet FCC Class B, UL 1950 & CSA

SBC

- From 486 to Dual Pentium Pro Processor
- Compatible w/ WIN NT, OS/2, LAN, SCO Unix...
- On-Board VGA/ SCSI options



SRC-620

SR-485ATX

We design and manufacture custom chassis!!!

1-800-700-8560

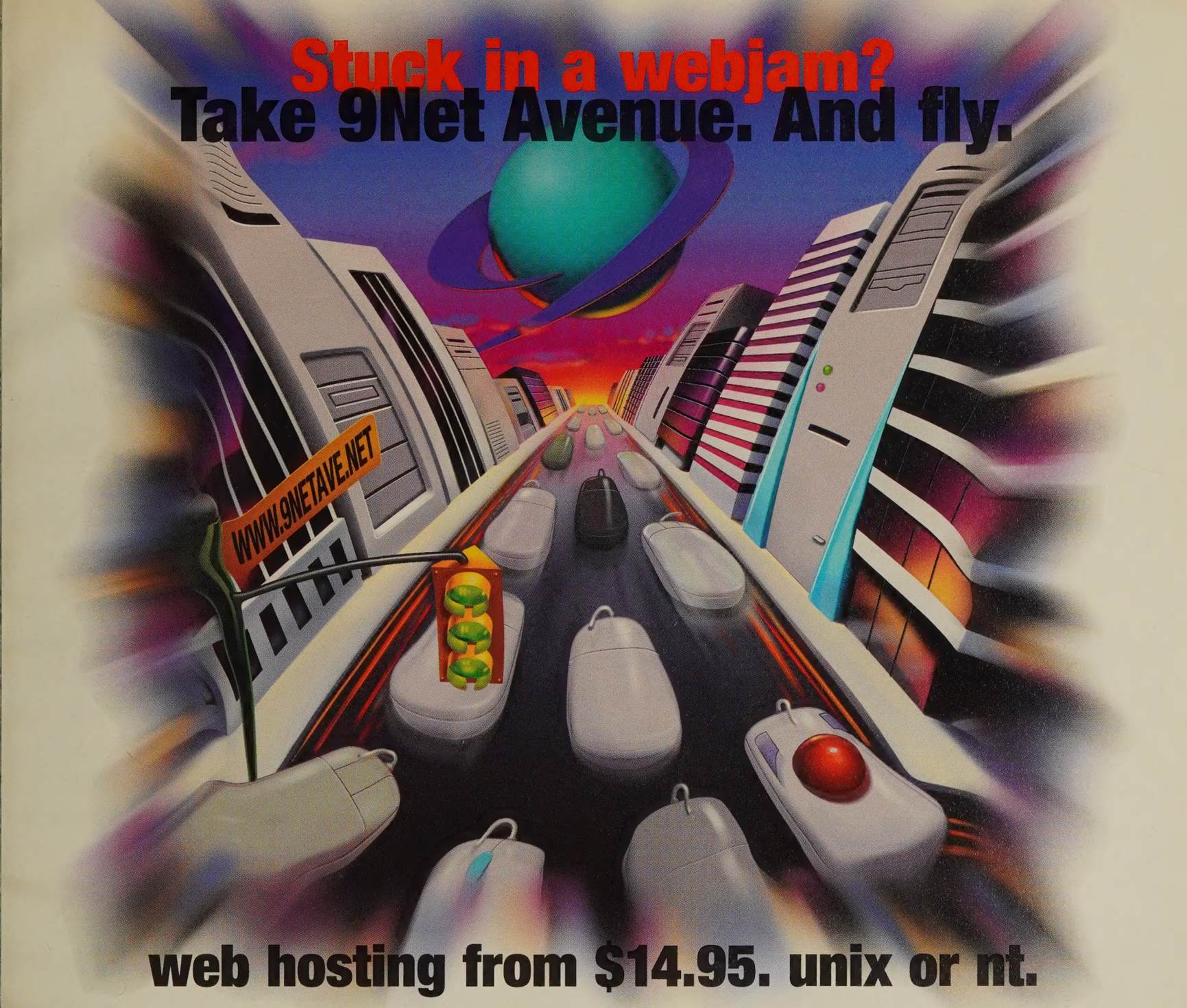
Made in USA

COMDEX Fall '97
Nov. 17 - 21, 1997
Las Vegas Convention Center
Pavillion #2, Booth No. 2446

Computer TELEPHONY CONFERENCE & EXPOSITION
March 3 - 5, 1998
Los Angeles Convention
Internet Pavillion, Booth No. 3501/3600

*Ask for a FREE pass.

1202 Apollo Way, Sunnyvale, California 94086 Tel: (408) 720-1090 Fax (408) 245-2570 http://www.siliconrax.com E-mail: info@siliconrax.com



web hosting from $14.95. unix or nt.

The Web is crucial for any on-line business. A webjam on the Net is a one-way street to loss of sales and missed opportunities. 9NetAvenue offers fully scalable **SGI Origin 2000 web servers** and state-of-the-art network appliance file servers that are linked through industrial strength **Cisco 7500 Series router**, into redundant **UUNet, MCI, and GTE International OC-3 lines**. It's all **protected by Fault Tolerance UPS systems** using diesel generators, and supported by a megaterabyte backup system. Using BGP-4 protocol and multi-homed connectivity, 9NetAvenue always finds the closest route to a massive OC-12 fiber optic backbone, so you're never bogged down in traffic. And with features like **PGP, SSI, mSQL, MS SQL, anonymous FTP and free shopping cart** – with multiple POP3 accounts, personal CGI directory and library, and unlimited forwarding aliasing and auto responders – your business can run flat-out and never get stopped. With the Dedicated Dual Pro Processor we will keep **Real Audio & Video** streaming capabilities at its best for you.

Take the express route to successful enterprise on the Net.
With 9NetAvenue your Web journey will always continue!

9Net ONE Plan $14.95/mo.
25MB disc space • 10 POP3 mailboxes

9Net PRO plan $39.95/mo.
100MB disc space • 25 POP3 mailboxes

99% uptime & 90 day money-back guarantee
Toll free multilingual tech-support

10 POP3 E-mail Accounts $7.95/mo.

Park Your Domain FREE

More on-line at www.9netave.net
Order on-line, get 1 month free.

dedicated server, yours or ours from $99/mo.
COMPAQ DELL digital Silicon Graphics

As an Internic "Premier Partner" we ensure instant set up and activation of an account.

iCat **One stop e-commerce solution by iCat includes software, development, hosting, and a free listing in giantmall.com**

real

1•888•9NETAVE 1•888•963•8283 1•201•933•0765

www.9netave.net

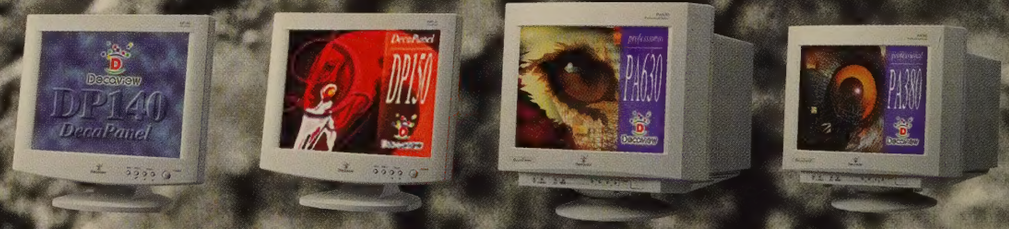
9NETAVENUE

Two Small Steps for DecaView.

Introducing two small steps (19" and 21" long) we've taken to shake up the monitor market.
The DecaView 19" demolishes the high price barrier for 20" monitors
without significantly sacrificing viewing capabilities.
And the DecaView 21" offers true twopage viewing with amazing resolution and refresh rate.
With a complete product line including LCD, professional, graphic, and value monitors.

DecaView is the smart choice for people with an eye for technology.

The DecaView 21" .107 KHz for 1600x1200 at 85Hz flicker-free refresh rate.



DP140	DP150	PA630	PA380
14"(13.8" Diagonal Viewable Area) 0.273*0.273 Pixel Pitch, Hor. Freq.:30-61KHz Max. Resolution: 1024x768	15" (15" Diagonal Viewable Area) 0.297*0.297 Pixel Pitch, Hor. Freq.:30-61KHz Max. Resolution: 1024x768	21"(20" Diagonal Viewable Area) 0.28mm/AG Stripe Pitch Hor. Freq.:30-107KHz Max. Resolution: 1600x1200@85Hz Manufactured in Japan	17"(16" Diagonal Viewable Area) 0.25mm/ AG Stripe Pitch Hor. Freq.:30-96KHz Max. Resolution: 1600x1200@75Hz 1280x1024@85Hz Manufactured in Japan

Decaview®

Catch Your Eyes. Catch Your Vision.

1236 San Luis Obispo Ave., Hayward, CA 94544

Tel: 510-429-8885

www.decaview .com

Toll Free Decaview Tech Support: 1-877-DECATEC (332-2832)

DECAVIEW AUTHORIZED RESELLERS

BAY AREA MICRO Inc. - 408-260-8796 • San Jose, CA
MICROBASE TECH. - 916-388-2000 • Sacramento, CA
BETA NINETIES - 415-974-1188 • San Francisco, CA
CHICOTEC - 408-954-8998 • San Jose, CA
IQ INFOQUEST - 650-917-9180 • Los Altos, CA
LJ SYSTEMS Corp. - 888-455-7978 • Hayward, CA

Two Giant Steps for DecaViewers.

"DecaView monitors have the same or better quality than all the leading brands! SO.....Why Pay More?"

The DecaView 19". With this new size, high prices are history.

*3-year limited warranty on parts, labor, and CRT with 1-year exchange policy**

Ask for and get your DecaView monitor at your nearest computer reseller today.

G400	GA387	G387	G380	V260
19"(18" Diagonal Viewable Area) 0.26mm Dot Pitch, Super High Contrast Hor. Freq.:30-95KHz 1600x1200@75Hz/ 1280x1024@85MHz	17"(16" Diagonal Viewable Area) 0.25mm/AG Stripe Pitch Hor. Freq.:30-95KHz Max. Resolution: 1600x1200@75Hz/ 1280x1024@85MHz	17"(16" Diagonal Viewable Area) 0.25mm Dot Pitch Hor. Freq.:30-95KHz Max. Resolution: 1600x1200@75Hz 1280x1024@85MHz	17"(16" Diagonal Viewable Area) 0.28mm Dot Pitch Hor. Freq.:30-70KHz 1280x1024/ 1024x768@85MHz	15"(13.8" Diagonal Viewable Area) Hor. Freq.:30-70KHz 1280x1024/ 1024x768@85MHz

AFA - 510-661-2828 • Fremont, CA
MICROBASE TECH. - 916-308-2000 • Sacramento, CA
SONGTECH INTL. - 510-770-9051 • Fremont, CA

TUNISS COMPUTER - 659-401-6138 • Burlingame, CA
MICRO CONCEPT - 510-781-0429 • Hayward, CA

3-Year Warranty of Parts
For Resellers Who Want...
Call 1-888-332-2808

ip network innovation

Internet business solutions

We've taken the BS out of the Internet.

NO Hassles Limits Excuses

Custom engineered Sun UltraSPARC-driven server cluster with dynamic, real-time load management and fault tolerance. Easy to use web-based domain administration.

Nationwide network backbone. Multiple T3 connections to the internet via private and public peering points. Over 350 local dial-up numbers available across the U.S. and Canada with 800 number access available.

True 24x7 live support. 'Round-the-clock availability via email, phone or web.

FREE 1st Month
FREE Setup

Consistently rated #1 hosting provider nationwide*

For your 'no BS' solution, call
1-800-939-4262
or visit us at
www.concentric.net/noBS

All-in-one packages from $29.95

- **Website hosting**
- **Multiple Email accounts**
- **Internet access**

ConcentricHost™
InternetSuite

concentric network

*The Ultimate WebHost List, 2/98, 3/98, 4/98.

© 1998 Concentric Network Corporation. All rights reserved. Concentric Network, ConcentricHost and the Concentric logo are trademarks of Concentric Network Corporation.

Built to Buy.

IDT WinChip™,
THE WINDOWS® MICROPROCESSOR,
has what you need to give customers what they want.

PERFORMANCE
optimized for the Windows software everyone uses. IDT WinChip lets you offer customers a great computer at a great price.

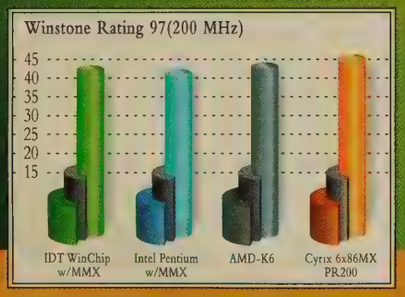
RELIABILITY
accruing from the expertise and long-term commitment of IDT, a major manufacturer of chips for computers, communications and networking.

COMPATIBILITY.
IDT WinChip runs Windows applications, peripherals and network environments. It's performance optimized for Windows and runs all programs optimized for MMX™ technology. IDT WinChip is certified by XXCAL and carries the Microsoft "designed for Windows 95" logo as proof of compatibility.

VALUE.
Sign up today to be an IDT WinChip Reseller and you'll get: Aggressive Market Development Funds to support your local promotions. Instant access to valuable technical information via a Reseller dedicated website. Plus top quality collateral that helps you sell.

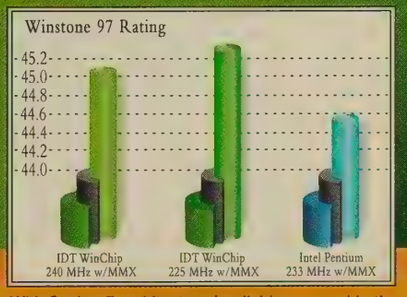
Designed for Microsoft Windows 95

Built to Sell.



For Windows business applications, IDT WinChip offers comparable performance to Intel Pentium® with MMX™ Technology, AMD-K6® and Cyrix 6x86MX™.

Smaller die area means lower production cost, lower power consumption and heat dissipation.



With Socket 7 architecture (available now and in the future), both 225 and 240 MHz IDT WinChip CPUs outperform Pentium, running at 233 MHz.

With IDT WinChip you can offer a lower-priced PC or custom-configure more high-margin peripherals, knowing you're backed up by a tested and proven technology with faster speeds soon to come. For more information contact:

1-800-WinChip *or* www.winchip.com

RESELLERS: CALL TODAY FOR A SPECIAL INTRODUCTORY LAUNCH KIT OFFER FROM:

Hamilton-Hallmark Technologies 800.778.2668 • MA Labs 1.408.941.0808
Wintec Industries 1.510.770.9239 ext 496 • Wyle 800.582.WYLE

IDT

INTEGRATED DEVICE TECHNOLOGY 2975 STENDER WAY, M/S C4-28 • SANTA CLARA, CA 95054 ©1998. WinChip is a trademark of Integrated Device Technology. MMX and Pentium with MMX Technology are trademarks of Intel Corporation. Microsoft, Windows and the Windows logo are registered trademarks of Microsoft Corporation. AMD K6 is a trademark of Advanced Micro Devices, Inc. 6x86MX is a trademark of Cyrix. All other trademarks or registered trademarks are the property of their respective owners.

PENTIUM® II NOTEBOOK

ChemBook™ 6000 features a modular design that allows you to upgrade every key component on the system:

- IMM CPU to Pentium® II 266/300
- DVD with hardware MPEG2
- 3D Graphics

Pentium II 266 SPECIAL

- Mobile Pentium II 266
- 32 MB SDRAM
- 3 GB HDD
- Window 95

$2899

"...an impressive run of more than 5 hours on our Battery-Mark test."

PC Magazine
January 20, 1998

IMM Technology ChemBook™ 6000

- Intel 430TX PCI Chipset Core Logic
- IMM Packaging, Tillamook 233 / 266 MHz
- Built-in 16MB SDRAM
- Expandable memory up to 144MB
- 128-bit PCI Graphics Engine with graphics and video Accelerator
- 13.3" TFT XGA LCD
- Supports 32-bit CardBus & Zoomed Video
- Supports UltraDMA / 33 IDE
- Removable 20X CD-ROM (Smart Bay) and 1.44MB Floppy Drive, DVD (optional)
- Auto Tilt-Up when opening LCD Panel
- 16-bit Stereo Sound System and 3D Surround Sound
- 1 x USB Port, 1 x Fast Infrared Port (IrDA 1.1 / FIR) and 1 x S-Video TV-Out
- Intel LM 78 Hardware Monitor Circuit design

All-In-One ChemBook™ 9780

- Intel 430TX PCI Chipset
- Intel Pentium® Processor with MMX
- Intel Tillamook, 233 / 266 MHz / AMD K6 mobile
- Expandable memory up to 128MB EDO / SDRAM
- 4MB EDO Video Memory
- 64-bit PCI Graphics Engine with hardware GUI Accelerator
- 14.1" XGA / 12.1" SVGA TFT
- Removable 20X / 24X (optional) CD-ROM, DVD (optional)
- FDD Bay interchange with LS-120, Iomega Zip 100MB drive, 2nd HDD (2.5" or 3.0" slim)
- 16-bit Stereo and 3-D Surround Sound System
- Built-In WaveTable
- 2 x USB Ports / 1x Fast Infrared Port (IrDA / FIR)
- 2 x video jack (Video In / Out)
- Smart Battery / Supports Secondary Battery

15.1" Screen ChemBook™ 7000

- Full PC97 and ACPI V1.0 Compliant
- Intel 430TX PCI Chipset
- Intel Pentium® Processor with MMX
- Intel Tillamook, 233 / 266 MHz / AMD K6 mobile
- Expandable memory up to 128MB EDO
- 4MB EDO Video Memory
- 15.1" XGA TFT LCD
- Removable 20X / 24X (optional) CD-ROM, DVD (optional)
- FDD Bay interchange with LS-120, Iomega Zip 100MB drive, 2nd HDD (2.5" or 3.0" slim)
- 16-bit Stereo Sound System with Full-duplex and 3-D Surround Sound
- Built-In 1MB hardware WaveTable
- IIS interface for external ZV port or MPEG audio

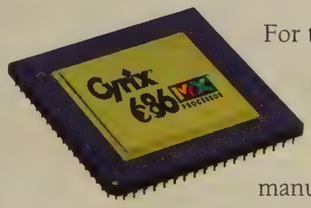
Call **800-866-CHEM** or Visit **WWW.CHEMUSA.COM** for an ***MONTHLY SPECIALS***
CHEM USA Corp, 8445 Central Avenue, Newark CA 94560
Phone: 415-387-2648 Fax: 510-608-8828

CHEM USA
The Notebook Company

ChemBook is a trademark of CHEM USA. Pentium is a registered trademark of Intel Corporation.

Reliable Performance,

Trusted Service



For the best price/performance value, depend on a Cyrix processor-based PC. Receive the same reliable Pentium® II-class performance processors used by leading PC manufacturers at a significantly lower price.

By working with leading software manufacturers, Cyrix ensures compatibility with the latest games and business applications running on Windows® 95.

Cyrix® 6x86MX™ PROCESSOR

HI TECH USA

800-831-2888

408-262-8688

FAX: 408-262-8772

1562 Centre Pointe Drive

Milpitas, CA 95035

Call Hi-Tech USA today to get into the action.

© 1998 Cyrix Corporation. Cyrix is a registered trademark and 6x86MX is a trademark of Cyrix Corporation. All other brands and names are the property of their respective owners.

SAMPO IS RATED A "BEST BUY" FROM JUST ABOUT EVERYONE.

AlphaScan 761
17" (16.1" viewable)
.25 Dot Pitch •Diamontron
1600 x 1280

AlphaScan 711
17" (15.8" viewable)
.28 Dot Pitch
1280 x 1024

PCTODAY

Best Buy

MARCH 1998

"At the top of the list is SAMPO's AlphaScan 711. Superb text and graphics output warrant our Best Buy reccomendation."

"SAMPO has done it again with its AlphaScan 761. This monitor is a true bargain, that proves itself worthy of our top pick honors in the price vs performance graphics category."

PC WORLD TOP 10 MONITORS

AlphaScan 520

"Terrific price, pleasing text and graphics detail. Easy to adjust."

CADALYST LABS 4½ STAR RATING 1998

"The display quality of the AlphaScan 810 is right on. Given the monitors excellent image, this monitor is a good choice."
"Pretty Impressive."

PC Computing

"For price, quality and usability, the AlphaScan 810 comes out on top."

MacUser RATED

AlphaScan 760

"4 mice award for outstanding performance, and technical scoring."

Isn't it time you rate a SAMPO display and see for yourself?

SAMPO TECHNOLOGY

Contact one of our fine resellers listed below or call SAMPO at **1-888-321-4100** or visit our web site: **www.sampotech.com**

ATMAN PC COMPUTER 650-827-0832 , 415-456-9339 • CAL LOGIC SYSTEM, INC. 510-354-0835 • COLFAX 408-730-2275 • LAITRON COMPUTER 408-321-9488, 510-647-1777, 510-460-0580 • NETIS 408-263-0368
PC TEN INC. 510-652-5268 • PIXEL USA COMPUTER 408-923-8333 • POLYWELL COMPUTERS 415-583-7222 • RIGHT TECH INC. 408-524-5400 SAN FRANCISCO COMPUTER 415-752-3891

All publications mentioned are trademarks of their respective companies.

• DIAMONDTRON Apeture Grille CRT. DIAMONDTRON is a registered trademark of Mitsubishi Electric.

BOTH SINGLE AND DUAL DRIVE MODELS AVAILABLE.
MULTIMEDIA PROCESSOR ACCELERATES DUPLICATION.
EXTERNAL SCSI-II PORT WORKS LIKE A STANDARD CD WRITER FOR CREATING CUSTOM DISKS.
TOTALLY SELF CONTAINED, NO CONNECTION TO A PC IS REQUIRED.
INTERNAL A/V HARD DRIVE STORES DISK IMAGES FOR MULTIPLE COPIES, AND CUSTOM AUDIO DISKS.
ADVANCED FORMAT DETECTION PRODUCES PERFECT DUPLICATES ON STANDARD CD-R MEDIA.
Dupe-It!

COPY ANY CD INSTANTLY. NO PC REQUIRED.

CD DUPE-IT!
Instantly duplicate CD-ROM disks for software distribution. Make backup copies of your favorite software on rugged, permanent media. Produce disks quickly and economically. No mastering or multimedia experience is required.

Insert your original disk and press "start." The multimedia processor quickly copies any disk to the internal A/V hard drive. Insert blank disks and make as many copies as you like. You'll produce identical, bit-for-bit duplicates. The system is totally self contained—no connection to a PC or Mac is required. Just plug in the power cord and press "start"—it's that easy.

BUY MANUFACTURER DIRECT: $1095
408 588-1110

You can even make your own custom audio disks without a PC! Insert your original CD's, select the tracks you want, and CD Dupe-It will copy them to the internal hard drive. Then insert a blank CD, and you'll have a custom audio disk with just the songs you want.

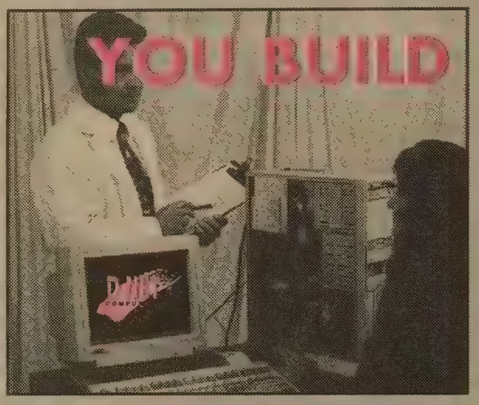
With the included CD mastering software, CD Dupe-It will work overtime as your personal CD mastering system. Just attach a SCSI cable to your PC or Mac, and you're ready to design and create your own original CD's. Similar systems used in duplication houses cost over $10,000. Now you can easily copy disks yourself for a fraction of the price.

CORPORATE SYSTEMS CENTER
3310 WOODWARD AVE., SANTA CLARA, CA 95054
WWW.CORPSYS.COM

Available at Disk Drive Depot, T-Zone and Halted Specialties. Software publishers—ask about our high-volume multi-drive duplication systems.

D NET COMPUTERS

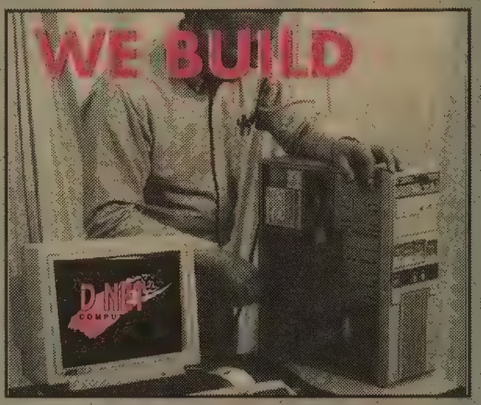
Since 1989 Now with 8 Locations to Serve You!



MAY SPECIALS

Rockwell K56 Fex Modem
PCI Interface
Upgradeable to ITU/TIA
Data, Fax, Voice
Special $75

PCI Sound Card
3D Audio and 64-voice wavetable
Supports DirectSound and DirectSound 3D
Complies with Intel AC97 and Microsoft PC 97/98
Special $47



PENTIUM® SYSTEM w/MMX TECHNOLOGY

- Pentium® Motherboard w/Intel TX Chipset
- 32MB Memory (Call for 168-pin DIMM Option)
- Enhanced PCI IDE and High–Speed IO on Board
- Mouse and Domino Mouse Pad
- 1.44 Floppy Drive
- Microsoft Windows 95
- 512K Cache
- 2.1GB IDE Hard Drive
- 3D PCI Graphics Card w/2MB DRAM
- Mini Tower Case
- Windows 95 Keyboard .

INTEL PROCESSOR	AMD PROCESSOR	CYRIX PROCESSOR
Pentium®-166MMX. $629	K6-200MMX .. $629	M2-P200C $619
Pentium®-200MMX. $642	K6-233MMX .. $639	
Pentium®-233MMX. $699	K6-266MMX .. $739	
	K6-300MMX .. $829	

SYSTEMS w/PENTIUM®-II PROCESSOR

- Intel Pentium® II Motherboard & Cooling Fan
- Enhanced IDE/PCI High-Speed I/O
- 32MB RAM
- 2.1GB IDE Hard Drive
- 1.44MB Floppy Drive
- 64-Bit 3D PCI Graphic Card w/2MB DRAM
- Mid Tower Case ATX
- Mouse & Domino Mouse Pad
- Windows 95 104 Keyboard
- MS Windows 95 (Monitor Not Included)

Pentium®-II 233MHz/512K $859

Pentium®-II 266MHz/512K $909

Intel 440LX Chipset M/B & Pentium®-II 300MHz/512K $1039

Pentium®-II 333MHz/512K $1169

Dual Pentium®-II Motherboard w/Single 350MHz Processor $1359

Pentium®-II 400MHz/512K $1599

Dual Pentium®-II Systems ..... Call

Monitor Options:

14" SVGA .28	$139
15" SVGA .28	$179
17" SVGA .28	$319
21" SVGA .28	$949

Multimedia Bundles

16MB 3D Sound Card, Speakers, 107 Titles, CD/SW, & CD

16X IDE	$124
24X IDE	$129
32X IDE	$139

NEW INTRODUCTION

2X DVD-ROM

1-Layer Disc 4.7GB/Side
2-Layer Disc 8.5GB/Side
Transfer rate at 2.76MB/Sec, Access
155MB, Buffer size: 572KB, Interface EIDE
(ATAPI).....Special $162

MATROX PRODUCTION G100

64-bit AGP Video Card with
MGA G100 Chipset
1600x1200 in True Color, 230MHz
RAMDAC, Support 2D, 3D
Special 4MB..... $95/8MB..$109

INTERNET SPECIALISTS

We Connect You To The World

- Hardware/Software Upgrades for Internet
- Internet Services Available

SEE YOUR LOCAL DOMINO STORE FOR DETAILS

CALL FOR ITEMS NOT LISTED

LOS ALTOS
307 SECOND ST.,
415/941-7778

BERKELEY/EMERYVILLE
1552 BEACH ST., STE. A
510/653-6286

SAN FRANCISCO
3400 GEARY BLVD.
415/668-9311
OPEN SUNDAY

SAN RAFAEL
757 LINCOLN AVE., STE. 30
415/453-8525

NORTH VALLEY
308 SOUTH ABEL
408/719-9552

BLOSSOM HILL, SJ
461 BLOSSOM HILL RD., UNIT M
408/574-4977

SANTA ROSA
1740 Santa Rosa Ave.
707/523-2055

MILPITAS
976 HANSON COURT
408/946-6991

D NET COMPUTERS
Since 1989

Prices subject to change without notice. We are not responsible for typographical errors.

MULTI-INTEGRATION CORPORATION

MIC COMPUTER

2670 So. White Road • Suite 100 • San Jose, CA 95148

Bus: (408) 238-8887 • (408) 238-8878

Fax: (408) 238-8895 • E-mail: miccomp@ix.netcom.com

Best Service • High Quality • Lowest Prices

Sale! POWER Multimedia System

- Pentium II Motherboard w/Intel 440LX AGP set
- Intel Pentium® Processor Cooling Fan
- 32MB 10ns SDRAM 168 pins
- Teac 1.44MB Floppy Drive
- 4.3GB Ultra ATA Hard Disk (33MB/S)
- YAMAHA sound OPL 16 PnP
- 24X EIDE CD ROM
- Diamond Stealth 4000 3D AGP with 4MB Video
- Premium ATX Medium Tower 235W PS
- Rockwell 56K Fax/Modem/Voice
- Windows 95 Enhanced Keyboard
- Logitec PS/2 mouse with pad
- Pair of 120W Multimedia Speakers
- Windows 95 CD/Manual add $85

Pentium® II 233MMX $799.00

Pentium® II 266MMX $839

Pentium® II 300MMX $959

Pentium® II 333MMX $1,089

Sale! SUPER POWER Multimedia System

- Pentium II Motherboard w/Intel 440BX AGP set
- Intel Pentium® Processor Cooling Fan
- 64MB 10ns SDRAM 168 pins
- Teac 1.44MB Floppy Drive
- 6.4GB Ultra ATA Hard Disk (33MB/S)
- YAMAHA sound OPL 16 PnP
- Toshiba 32X EIDE CD ROM
- Matrox G100 3D AGP with 4MB Video
- Premium ATX Medium Tower 235W PS
- Rockwell 56K Fax/Modem/Voice
- Windows 95 Enhanced Keyboard
- Logitec PS/2 mouse with pad
- Pair of 120W Multimedia Speakers
- Windows 95 CD/Manual add $85

Pentium® II 400MMX $1,659.00

Pentium® II 300MMX $1,199

Pentium® II 333MMX $1,319

Pentium® II 350MMX $1,449

BEST BUY

	MB W/CPU	Basic System
• Pentium® 166MMX/512K	$159	$249
• Pentium® 200MMX/512K	$179	$269
• Pentium® 233MMX/512K	$199	$289
• AMD K6-233Mhz/512K	$169	$259
• Pentium® II 233Mhz/512K	$319	$439
• Pentium® II 266Mhz/512K	$369	$499
• Pentium® II 300Mhz/512K	$499	$629
• Pentium® II 333Mhz/512K	$619	$749

Basic System: CPU & M/B, 16MB, 1.44MB FDD, IDE 1/0, Mini Case w/230W PS, 104 Keyboard, 512K Pipeline Burst Cache, CPU Cooling Fan.

Monitor

Digiview

Digiview 17" 1707/1709D..... $299/$449

Digiview 15" 1510/19" 1909.. $189/$629

Sony

Sony 17" 200ES/200GS..... $549/$629

NEC

NEC 15" A500/M500..... $259/$329

NEC 17" A700/M700..... $439/$629

Impression

Impression 7 Plus 17"/17".....$329/$449

Sale! Multimedia System MMX™ Technology

- ASUS SP97 Super TX Chipset MB
- 512K Pipelined Burst SDRAM Cache
- Intel Pentium® CPU w/ Cooling Fan
- 16MB 60ns Expandable to 256MB
- 1.44MB Floppy Drive
- 2.1 GB Ultra ATA Hard Drive (33MB/S)
- Built-in Graphic Engine SiS/4MB
- 24X EIDE CD ROM
- YAMAHA OPL3 16 Bit Stereo Card
- 33.6K Fax/Modem/Voice
- Mini Tower Case with 230W PS
- Windows 95 Enhanced Keyboard
- Microsoft Compatible Mouse
- Pair of 100W Multimedia Speakers
- Windows 95 CD/Manual add $85

Pentium® 166MMX $479.00

Pentium® 200MMX $499.00

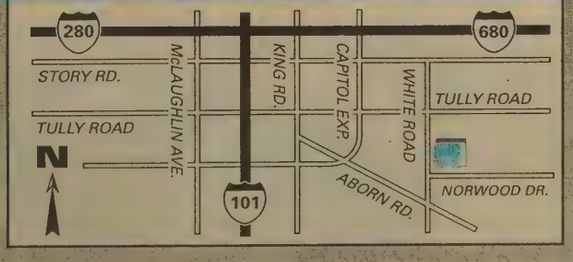
Pentium® 233MMX $599.00

AMD® K-6 233Mhz $499.00

COMPUTER UPGRADE / SERVICES AVAILABLE

ONE YEAR PARTS WARRANTY
LIFETIME LABOR ON SYSTEMS
WE OFFER EXCELLENT SERVICES AND TECHNICAL SUPPORT

STORE HOURS: 9:30AM - 7:00PM
SAT. 10:00 - 5:00PM • CLOSE SUNDAY



Novell Certified NetWare Engineer

NETWORKING SERVICES

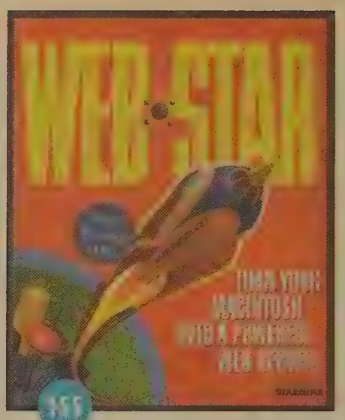
Novell
Windows NT
Hardware & Software Installation
Network Maintenance
Network Cabling
Service Contract Available

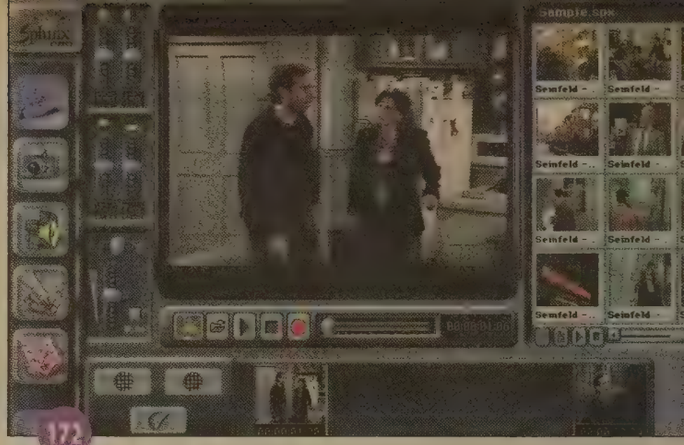
FREE ONSITE CONSULTING & QUOTES CALL FOR DETAILS!

MicroTimes

May 20, 1998 • Issue #179

Doing Business On The Internet





coverstory

92 Turning The Car Business Upside Down
By Mary Eisenhart
Photos By Ann Summa/Gamma-Liason
Auto-By-Tel's Customer-Friendly Digital Revolution.

114 Compare.Net: Smart Shopping Starts Here
By Sara Tassione
Stop By Before You Buy.

124 BMUG
By Peter Linde and Same Penrose
Safe Shopping On The Internet; Plus Surfing On A Mac.

news&views

20 Industry Insights
By Paul Hoffman
Another Mess After The Y2K Crisis Hits. 20
MicroTimes Stock Index 26

28 Four Rules For Net Success
By David Kline
And Not A Lot Of Hot Air.

222 Dvorak's Last Column
By John C. Dvorak
Old Wish Lists Never Die.

businesssolutions

30 Mobile Computing
By Ed Kahn
Addonic's PocketZip; Plus Toshiba's Libretto 50CT.

38 Info Appliance
By Douglas J. Nakakihara
Motorola's Rugged Walkie-Talkies For The '90s.

48 Telecommuting
By Robert Moskowitz
Working At Home In 1997.

58 UNIX
By Bennett Falk
Strange Days In Java Land.

74 32-Bit Computing
By Fabian Pascal
The Disk Subsystem.

82 Small Office/Home Office
By Birrell Walsh
Net-Enabled Good Deeds For The Small Office.

90 Internet Email Strategies
By Auren Hoffman
Simple Techniques For Better Results.

online

132 Internet
By John S. Quarterman
Avoiding The Telephone.

136 Online Services
By Bill Gram-Reefer
The Decade Of Convergence.

140 Web Page Listings

productspotlight

154 Updates & Announcements
PC Software
ACT! 4.0 For Windows 95/NT 154
Asset Minder Pro.....154
Procomm Connections.....154
Monitors
DragonEye D97A 155
DecaPanel DP150 155
Macintosh Software
WebSTAR 3.0.....155
DeBabelizer 3.0 156
PC Hardware
Stallion BX 156
Rock City ST-200 160
5GB Removable Hard Drive 160
PalmPilot Software
Actioneer For PalmPilot 162
Web Software/Server Software
Real-time Page Management.....162
Macintosh Hardware
Smart Serial 6: T1 Edition.....162
Books
Poor Richard's Web Site 163
Year 2000 Readiness Kit 163

multimedia&beyond

164 Gulch Gossip
By Jonathan E.

169 Multimedia 101
By Jonathan E.
Shaping San Francisco With Non-Linear Storytelling.

172 Video Sphinx Pro
By Douglas J. Nakakihara
Capturing Motion On Your PC.

resources

176 Calendar Of Events
Reconnecting, a "Weekend Workplace Workshop" 176
ComNet Conference & Exposition 176

180 User Group/BBS Listings

189 Classifieds

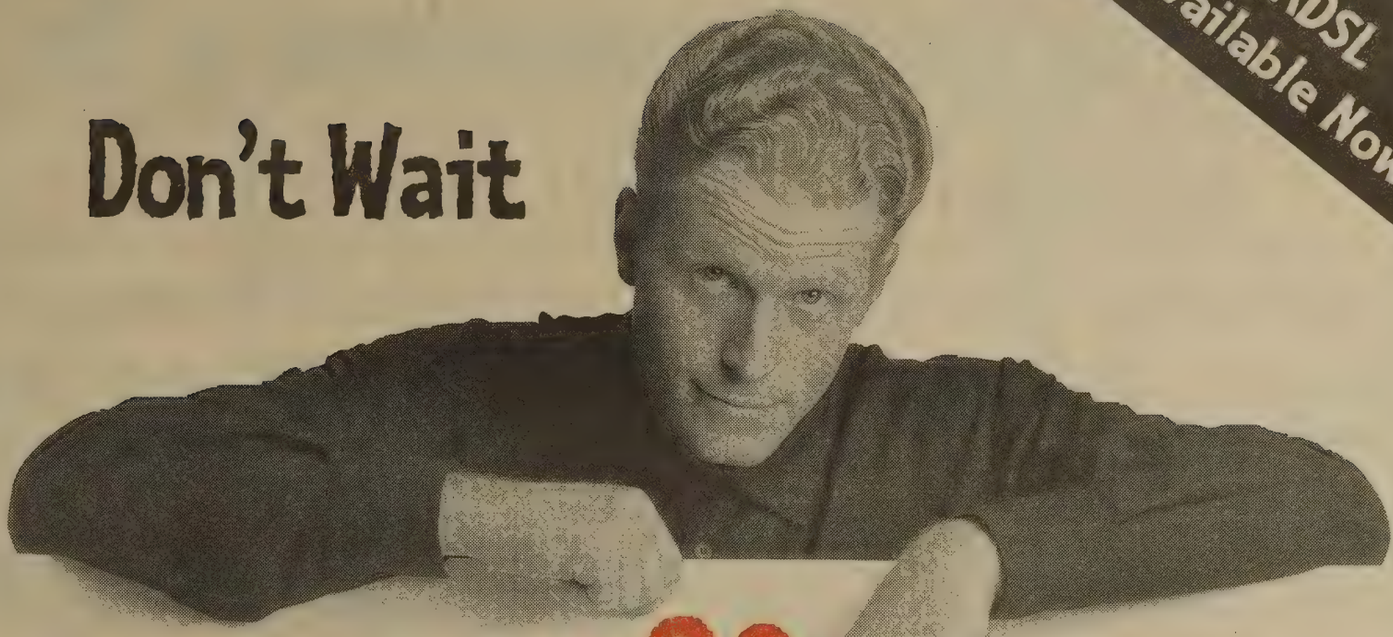
212 Index Of Advertisers

220 Index Of Advertisers By City

Reader Resources
Quotation Hotline Form 52
MicroTimes "Super Stop" Locations 186
Classified Advertising Placement Form.....189
Classified Career Marketplace.....204

ADSL Available Now!

Don't Wait



v.90 NOW!

Don't Wait

Don't Wait

Why wait? Slip.Net Has v.90 Modems Installed Now!

Slip.Net supports the new standard for modem speed with the introduction of v.90. With a v.90 modem you will be able to access the internet at speeds twice as fast as 28k. Look to Slip.Net for the latest equipment and features that you demand such as high speed access, 50mb of WEB storage, dedicated IP addresses, FrontPage® 98 support, online back-ups, Shell access, full CGI capabilities and your own Domain name.

Slip.Net also offers **FREE** FrontPage® 98 training classes to help you develop a great web site and a **10-day FREE trial,** to make sure you're happy with Slip.Net.

Get Connected for only: 19.95 per month*

* Plus a one-time $30 start-up fee or switch for FREE. (Webhosting account required for FrontPage® 98 training class.)

SLIP.NET

We're On It.
www.slip.net

Sign up online at: **www.slip.net** or call:
San Francisco: **415.281.4447**, South Bay: **408.538.0150**,
East Bay: **510.763.7547**, all other areas: **800.754.7638**

NATIONWIDE ACCESS

K56 flex

US Robotics X2 TECHNOLOGY SUPPORTED

Serving the Professional Needs of the Financial District for Over 8 Years

Intel Pentium® II Processor Based PC System

- Pentium® II 233MHz PCI/AGP/ISA Mainboard
- Intel Pentium® II 233MHz MMX Media Enhancement Technology
- 512K 2nd Level Pipeline Burst Cache
- Pentium® II CPU Cooling Fan & Heat Sink Unit
- 32MB SDRAM Memory
- 3.2GB Ultra DMA IDE Hard Disk
- 1.44MB (3-1/2") Floppy Disk Drive
- PCI Enhanced IDE Controller
- 2 Hi-Speed Serial & 1 Enhanced Parallel Port
- Diamond Stealth 3D PCI SVGA Card w/4MB RAM
- Win95 PS2 104 Enhanced Keyboard
- Enhanced ATX Medium Tower Case w/235W UL Approved Power Supply
- Diamond Supra 56K Internal Fax Modem
- 24X Internal Enhanced IDE CD-ROM Drive
- 16-Bit 3D Stereo Sound Card
- Pair of Stereo Speakers 50W
- Logitech PS2 Mouse & Pad
- MS Windows 95 Software w/Manual

System Only.....$999.00

System with 15" SVGA Color Monitor $1199.00
System with 17" SVGA Color Monitor $1289.00
Upgrade to Pentium® II 266 . . . . . .Add $70.00
Upgrade to 64MB SDRAM . . . . . .Add $60.00
Upgrade to 6.4GB Ultra DMA HDD . . . . . .Add $80.00

Intel Pentium® II Processor Based PC w/DVD System

- ASUS Pentium II PCI/AGP/ISA Mainboard
- Intel BX Chipset
- Intel Pentium II 350MHz MMX Media Enhancement Technology
- 512K 2nd Level Pipeline Burst Cache
- Pentium II CPU Cooling Fan & Heat Sink Unit
- 64MB SDRAM Memory
- 8.4GB UDMA IDE Hard Disk
- 1.44MB (3.5") Floppy Disk Drive
- PCI Enhanced IDE Controller
- 2 Hi-Speed Serial & 1 Enhanced Parallel Port
- Graphics Blaster Extreme PCI w/4MB
- Win95 PS2 104 Enhanced Keyboard
- Enhanced ATX Medium Tower Case w/235W UL Approved Power Supply
- Supra Express 56K Internal Fax Modem
- DVD X2 CD-ROM Drive
- MPEG2 Decoder Card
- SB AWE64 Stereo Sound Card w/Wavetable
- Altec Lansing ACS-45 Stereo Speakers w/Subwoofer
- Iomega 100MB Internal Zip Drive
- 1* 100MB Zip Disk
- Microsoft Intellimouse & Pad
- MS Windows 95 Software w/Manual

System Only: $2278.00

Options:
System with a 17" Color Monitor (.25dpi) $2645.00
System with a 19" Color Monitor (.26dpi) $2865.00
Upgrade 350MHz Processor to 400MHz . . . . . add $245.00

Upgrade Your 286/386/486 System to:

PCI/ISA Motherboard
(Supports up to 233MHz Processor)
"512K" Pipeline Burst Cache
Intel Pentium® 200MHz MMX Processor
CPU Heatsink & Cooling Fan
32MB RAM - 60ns (72 Pins)
64-Bit PCI SVGA Card w/1MB

Only $345

(Free Installation)

For other computer configurations and parts, please call.

NORTHGATE OMNIKEY 104 KEYBOARD

(High Quality, Heavy Duty Keyboard)

Only...$29.99

Limited Quantity, Please Call Today

Hewlett Packard Authorized Laser Printer Repair Service Center

IBM® HEWLETT PACKARD *Authorized Reseller*

BETA NINETIES COMPUTER INC.

IBM® HEWLETT PACKARD *Authorized Reseller*

Fast Efficient Service
•We do quick turnaround.
•We do everything we can for you.
•We're the Leader in Customer Service

566 Mission Street, San Francisco, CA 94105
(415) 974-1188 Fax (415) 974-1575

Office Hours:
M-F 9-6, Sat 10-4

DISCOVER PO VISA MasterCard

After business hours service available. 1 year parts & 2 years labor warranty on computer systems only.
Prices subject to change w/o notice. Not responsible for typographical errors. Pentium is a registered trademark of Intel Corporation.

CORPORATE PO'S WELCOME!

Systems Super Sale!

www.kingstarusa.com

P-II 440LX SYSTEM

- P-II 233-333 Motherboard
- Intel AL440LX Chipset
- AGP Overview
- 32MB SDRAM
- 1.44MB Floppy Drive
- 4MB SVGA Card
- ATX Mid Tower Case w/235W PS/2 Fan
- Win 95 Keyboard/PS/2

Pentium® II 233MHz MMX $499

Pentium® II 266MHz MMX 549
Pentium® II 300MHz MMX 659
Pentium® II 333MHz MMX 819

INTEL PENTIUM II SERVER SYSTEM

- Intel Atlanta Motherboard w/512K L2 Cache
- Intel 82440LX Chipset w/AGP
- 32MB EDO SDRAM
- 4.3GB Ultra DMA IDE HD
- Intel PILA8465 10/100BT Ether Card
- 1.44MB Floppy Drive
- 4MB SGRAM AGP VGA Card 3D 4000
- High Quality ATX Med. Tower Case w/235W PS
- 24X CD-ROM Toshiba
- 104-Key PS/2 Enhanced Keyboard
- Includes Windows NT 4.0 for Workstation

Pentium® II 233MHz MMX $945

Pentium® II 266MHz MMX $995
Pentium® II 300MHz MMX 1095
Pentium® II 333MHz MMX 1239

OFFICE SYSTEM SPECIAL

- Intel Atlanta Motherboard Pentium®II
- Intel AL440LX Chipset
- AGP Overview
- Intel Pentium® II Processor
- 32MB SDRAM
- 2.6GB Hard Drive Ultra DMA
- 1.44MB Floppy Drive
- 24X CD-ROM Toshiba
- 4MB SGRAM AGP VGA Card 3D 4000
- Yamaha Sound Card
- ATX Mid Tower Case 230W UL PS
- Win 95 Keyboard/PS2
- Microsoft Mouse
- Windows 95 CD

Pentium® II 233MHz MMX $899

Pentium® 266MHz MMX $935
Pentium® 300MHz MMX 1055
Pentium® 333MHz MMX 1199

INTEL PII 233/400MHz SYSTEM

- PII Processor Support Highest System 233 to 400MHz
- 8244BX AGPset Supports both 66 and 100 MHz
- 64 MB SDRAM to 384 MB ECC Memory
- Universal Serial Bus (USB)
- 4 MB AGP Cards 3D 4000
- 1.44 MB Floppy Drive
- ATX Mid Tower Case w/ Fan
- Win95 Keyboard/PS/2

Pentium® II 233MMX $745

Pentium® II 266/300MHz MMX $785/925
Pentium® II 333MHz MMX 1045
Pentium® II 350/400MHz MMX 1145/1345

SMALL OFFICE/HOME MULTIMEDIA

- Pentium Motherboard w/512K Pipeline Burst Cache
- 16MB EDO RAM 60ns
- 2.1GB Hard Drive
- 1.44MB Floppy Drive
- PCI 64-Bit Video Card w/1MB (to 2MB)
- Mini Tower 230W PS
- 104-Key Win 95 Keyboard
- Genius Net Mouse
- 14" .28dp, SVGA Monitor
- 20X IDE CD-ROM
- Yamaha 16-Bit Sound Card
- 80 Watt Stereo Speakers
- 33.6 Fax Modem w/voice
- Windows 95
- Microphone FREE

Intel 166MMX $720

Intel® 200/233 MMX $739/789
AMD K6-200/233 . . . . . 729/749

PENTIUM SYSTEMS SPECIAL

- Intel Pentium® CPU w/Ball Bearing Fan
- 512K Pipeline Cache on Board
- 16 MB up to 256 MB 72-Pin EDO
- SVGA Card 1 MB (up to 2 MB)
- 1.44 MB Floppy Drive
- PCI Controller w/I/O w/16550
- 1.7GB Hard Drive
- 104 Win 95 Keyboard
- Mini Tower Case
- 230 Watt Power Supply

Intel 166MMX $399

Pentium® 200MMX $410
Pentium® 233MMX 440
AMD K6-200MMX 399
AMD K6-233MMX 410

PENTIUM WORKSTATION

- Intel MMX Pentium® Processor
- Fast IDE w/16550
- 512K Pipeline Cache
- 32MB EDO 60ns RAM
- 2.6GB EIDE Hard Drive
- 1.44MB Floppy Drive
- 24X EIDE CD-ROM
- 64-Bit SVGA Video Card/ 1MB
- 80-Watt Speakers w/AC Adapter
- Mini Tower Case w/230 PS
- 104-Key Keytronics
- Genius Net Serial Mouse
- Microsoft Windows 95
- 32-Bit Network Card

MMX $579

Pentium® 200MHz MMX $599
Pentium® 233MMX 649
AMD K6-200MHz 579
AMD K6-233MMX 599

PENTIUM II ASUS SYSTEM

- ASUS P2L97 Motherboard
- Intel AL440LX Chipset
- AGP Overview
- Intel Pentium II 233 to 333MHz
- 32MB SDRAM
- 2.6GB Hard Drive
- 1.44MB Floppy Drive
- 24X CD-ROM
- 4MB SVGA Card
- 56.6 Fax/Modem w/voice
- ATX Mid Tower Case w/235W UL PS
- Win95 Keyboard/PS2
- Genius PS/2 Mouse
- Windows 95 CD

Pentium® II 233MMX $888

Pentium® 266MHz $948
Pentium® 300MHz 1048
Pentium® 333MHz 1198

MAINBOARDS

Intel SE 440BXPA $239
P-II Intel 440LX/AGP $109
Intel Atlanta 440LX Board . . . $155
Intel Atlanta 440LX Board/SD . $170
Dakota Dual 440LXA $469
VX Pro II, 4 PCI w/512 K/sound MMX/AMD/CYRIX $69
Triton TX 512K $75
ABIT LT6 PII ATX 440LX $129
PS/512K 75-233MHz $65
ASUS Pentium® II P2L97 AGP $140
ASUS TX97E $128
ASUS PL297S $245
Tyan P-II 16925 . . . . . $189
Tyan PS S1523 . . . . . $118
Tyan Dual S1692DL $259
Super Micro P5 MS98 . . . . . $139
Super Micro P6 DLS Dual . . . $399

MEMORY / CPUs

Intel Pentium® II 233 MHz . . . $209
Intel Pentium® II 266 MHz . . . $249
Intel Pentium® II 300 MHz . . . $375
AMD K6 MMX 233/200 . . . . $95/85
8/16/32MB EDO 60ns . . $19/29/49
32/64/128 SDRAM 168 Pins. $49/99/189

SVGA CARDS

ATI Expert@Play 4MB w/AGP . . $99
ATI Expert@Play 8MB w/AGP . $149
Diamond Stealth 64 3D w/4MB EDO $75
Diamond Stealth 64 3Dw/2MB . $59
Diamond GL 1000 Pro/8MB . . $189
Office Pro S3 Trio 1MB $26
Matrox Millennium II w/4MB/8MB $119/179
SVGA 4MB w/AGP $69
Matrox Mystique 220 (Retail)4MB . $99
SVGA 1MB to 2MB PCI 64 Bit . $25
Trident/TV 4MB $49

NETWORK CARDS

NE2000 PnP Novell Certify 32-Bit PCI $17
Intel Express Pro PCI . . . . . 10/100BT $48
3Com 509TP ISA $49
3Com 905TX PCI $65
Fast 16-Port 100TX $585
Ethernet 5-Port Hub 10BT $45
Ethernet 8-Port Hub 10BT $59

HARD DISK DRIVES

2.0GB IDE $129
3.5GB IDE $139
6.4GB IDE $199
8.4GB IDE $299
4.3GB Ultra Wide SCSI $279
9.1GB Ultra Wide SCSI $749
1.44 Floppy $17
LX 120 Floppy $99

CONTROLLERS

Adaptec 2940 SCSI $139
Adaptec 2940 Ultra SCSI $149
Adaptec 2940 Ultra Wide SCSI $189
Zip 100/ATAP/SCSI $99/110

CD DRIVES

32X SCSI NEC $119
24X SCSI NEC $99
DVD Tosh/MPEG w/Virge DX . $285
16X IDE/24X $45/55
32X IDE $70
60W/240W Speakers $10/25
Yamaha M7/M15 . . . . . $39/65
860W Sub P.M.P. $55

FAX MODEMS

33.6 w/Voice Int $36
56.6 w/Voice Int $65
USRobotics 56K Voice Int . . . $129
PCMCIA 33.6 Fax Modem $79
PCMCIA 56.6 Fax $119

SOUND CARDS

Yamaha Sound Card 3D $19
ESS 3D 16 Bit IDE $19
SoundBlaster 16 Bit PnP $39
Creative Labs AWE 64 . . . . . $69

SOFTWARE

MS Windows 95 CD Full w/Sys $89
MS Office Pro 97 CD w/Sys . . CALL
MS NT Server/W.S. 4.0 or 5.0 CALL

MONITORS

14" .28 SVGA $129
15" .28dp SVGA $169
17" SVGA .28 . . . . . $299
NEC A700 . . . . . $495
ViewSonic G771 . . . . . $399
Sony 17" .25dp 200ES $545
21" ViewSonic .26dp G790 . . $790
20" NEC Flat Panel $5650
19" V95 . . . . . $690
19" Hitachi .25 . . . . . $820

CASES

Mini Tower/Desktop w/230W PS$24/35
Mid Tower w/230W PS $28
Full Tower Case w/250W $55
ATX Desktop Case/235W $69
ATX Mid Tower Case/235W . . . $55
ATX Full Tower Case/300W . . $115

KEYBOARD & MOUSE

Keytronic/Mitsumi 104 Key . $17/13
Microsoft Natural Keyboard . . . $49
Microsoft PS/2 Mouse (w/Sys) $25
Microsoft Serial Mouse (w/Sys) or PS/2 . . . . . $25
Genius Net Mouse or PS/2 . . . . $10

We Also Carry These Brand Name Notebooks:

MULTIMEDIA NOTEBOOKS

TOSHIBA
HITACHI
FUJITSU
CHEM USA
EVEREX

Call for Latest Prices!

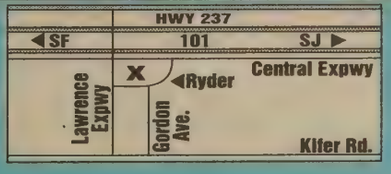
DIAMOND NEC ViewSonic ATi matrox SONY ASUS intel OMEGA 3Com

KINGSTAR COMPUTERS, INC.

Expert Sales, Service & Upgrades
Since 1986
MON-FRI 8:30-6:00
Sat/Sun by Appt.

SANTA CLARA

3081 Lawrence Expwy • Santa Clara CA 95051
TEL: (408) 736-8590 • FAX: (408) 736-4151



Prices and Company Policy Subject to Change W/O Notice. Not Responsible for Typographic Errors. Prices Reflect Cash Price Only.

King Star Computer http://www.kingstarUSA.com

MICROTIMES
May 20, 1998 • Issue #179

Contributors

John C. Dvorak

Jonathan E.

Paul Hoffman

Robert Moskowitz

John C. Dvorak (*www.dvorak.org*) writes many columns, hosts the "Software/Hardtalk" radio show, and finds inspiration in strange places.

Jonathan E. has worked with desktop multimedia since 1988. His USPS mailing address is c/o SoundSwell, 54 29th St., Richmond, CA 94804. His email address is *jeve@well.com* .

Bennett Falk works for Cloudscape, an Oakland-based Internet startup.

Bill Gram-Reefer, based in Concord, CA, is president of WORLDVIEW, specializing in connectivity and communications. He has been writing about Macintosh computers since 1984.

Auren Hoffman (*auren@bridgepath.com*) is an analyst and a programmer at BridgePath (*www.bridgepath.com*) and Director of Consulting at Human Ingenuity (*www.ingenuity.net*). Mr. Hoffman also writes a weekly column called Summation (*www.summation.net*).

Paul Hoffman is an independent consultant who's been writing about computers for over fifteen years.

Ed Kahn (*edkahn@well.com*) is a folklorist who maintains a strong interest in computers and lives in the East Bay.

David Kline (*dkline@well.com*) is an author, business consultant and commentator for "Marketplace" on National Public Radio. His book, *Road Warriors: Dreams and Nightmares Along the Information Highway* (Plume, 1996), which he co-wrote with Daniel Burstein, is available in paperback.

Peter Linde is currently serving his fourth year as a member of BMUG's Board of Directors. He is the CEO of his own Mac and PC consulting company based in the San Francisco Bay Area. He is oh-so-very happy to receive correspondence at *pbl@lindegroup.com* .

Robert Moskowitz (*RMoskowitz@aol.com*) is a consultant based in Woodland Hills.

Douglas J. Nakakihara is the products documentation manager for NewTek, Inc. He also dabbles in 3D animation and writes for various publications. He can be reached at *doug_nakakihara @newtek.com* .

Fabian Pascal is an independent industry analyst, consultant and author specializing in database management. Author of two books and a CBT course, he has contributed extensively to many industry publications, including *Database Programming and Design*, *DBMS*, *DataBased Advisor*, *Byte*, *Computerworld*, and *Infoworld*.

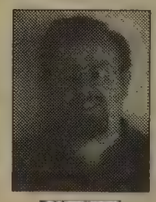
Sam Penrose is a longtime BMUG volunteer and the author of BMUG's "Which Mac Should I Buy?", a practical guide to selecting your next Mac.

John S. Quarterman (*jsq@mids.org*) is the senior technical partner of MIDS (Matrix Information and Directory Services) and editor of *Matrix News*. He is a longtime observer, consultant, and writer on the matrix of electronic networks.

Birrell Walsh (*birrell@well.com*) is a contributing editor for *MicroTimes* and a freelance writer for *BYTE* and other magazines.

Send Letters to the Editor at these addresses:
US Mail:
Letters
MicroTimes
1300 Clay St., Ste. 820
Oakland, CA 94612
fax: (510)768-1288
Internet:
editors@microtimes.com

Douglas J. Nakakihara


Fabian Pascal

Birrell Walsh

Say Goodbye and Get a Great Deal at the Envisions Scanner Outlet

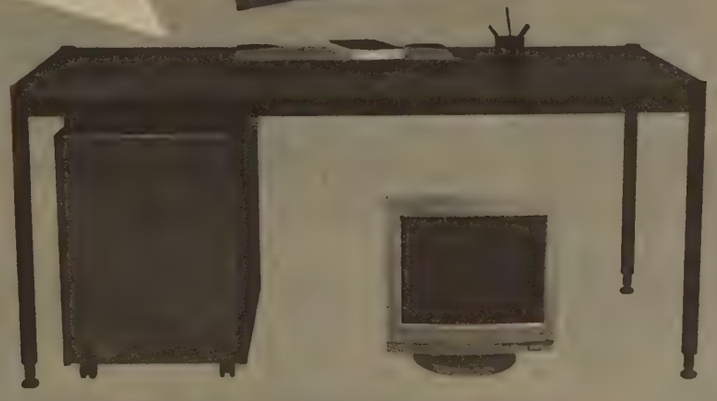
MOVING SALE!

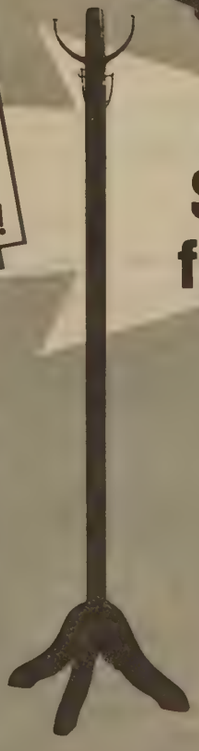
Software from $10.00

Envisions is moving to a new location at 47470 Seabridge Drive in Fremont! Come down to our moving sale and save on what we have to leave behind!

Office Furniture starting at $10.00

Flatbed Scanners from $49.00

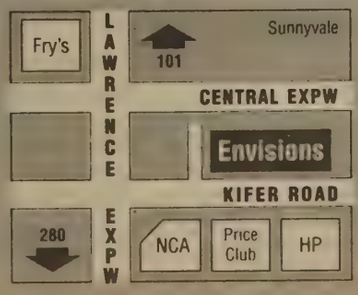




envisions scanner outlet

3485 Kifer Road • Santa Clara, CA 95051-0711

Photos in this ad are for illustration purposes only; actual clearance inventory available will vary. Some software is on CD-ROM with online manuals; disks & printed manuals available separately. Clearance units may be factory-serviced returns or discontinued models; please ask for details. Regular Envisions guarantees & warranties do not apply to clearance products. Products & prices subject to change without notice or remedy. © 1998 Envisions Solutions Technology, Inc. All rights reserved and trademarks acknowledged.



We'll ship anywhere in the SF Bay Area for $10!

30-Day Price Guarantee & 1-Year Warranty on New Scanners
Open Weekdays 7 am to 6 pm and Weekends 9 am to 6 pm

800/365-SCAN

Visit our web site at **www.envisions.com**

BEST SERVICE AND BEST QUALITY ARE WHAT MADE BESQ #1

The Best Notebooks On Sale

Active Color At Dual Scan Price

Best Price Guaranteed

Bright

Crisp

Light

Only $1429

Business Lease $54/Mo

- Intel 200MHz Pentium Processsor w/ MMX
- 32MB EDO RAM, 256K Burst Cache
- 12.1" TFT Active Color LCD Screen
- SVGA 800x600 16M Colors
- 64-bit Video 2MB EDO Memory
- Built-in 20x CD-ROM, 1.44MB Floppy
- Built-in 3.1GB Hard Drive
- 16-bit Full Duplex 3D Stereo Sound System
- Windows 95 Keyboard & Trackpad
- 2 Type II or 1 Type III PCMCIA Slots
- Supports CardBus & Zoom Video Port
- Multi I/O Ports including USB
- NiMH Battery, Carrying Bag & Power Adapter
- One Year Parts and Three Years Labor Warranty

Pentium 233MHz w/ MMX Only $1459

14.2" TFT Active Color On Sale

Call for All Chem USA Models

Wow

- Intel 200MHz Pentium Processsor w/ MMX
- 32MB SDRAM, 512K Burst Cache
- 14.2" TFT Active Mitsubishi LCD Screen
- XGA 1024X768 64K Colors
- 64-bit GUI Accelerator 4MB EDO Video RAM
- Removable 3.1GB HDD & 1.44MB Floppy
- Optional 20x CD-ROM Drive
- 16-bit Full Duplex Stereo Sound System
- Hardware WaveTable
- Full Size Windows 95 Keyboard & PS/2 Trackpad
- 2 Type II or 1 Type III PCMCIA Slots
- Supports CardBus & Zoom Video Port
- Multi I/O Including USB & Docking Ports
- Li-Ion Battery, Carrying Bag
- One Year Parts and Three Years Labor Warranty

Pentium II 266MHz & Tillamook 266MHz Available Call For Different onfigurations

Pentium 233MMX Only $2029

Only $1999

Business Lease $78/Mo

Toshiba Tecra 550CDT On Sale

Call for Toshiba, IBM, Compaq Notebooks!

- 266MHz Pentium Processsor w/ MMX
- 32MB EDO RAM, (Exp. to 160MB)
- 3.82GB HDD/ 1.44MB FDD
- 20x CD-ROM
- 56K Voice/ Data/ Fax Modem
- 12.1" TFT Active Matrix Color
- 1024 x 768 High Resolution Dispay
- Three Years Warranty

BEST PRICE

Only $3699

Business Lease $134/Mo

BESQ SYSTEMS

Tel: 408-942-6165

Corporate, Government & Education PO's Welcome

Business Financing Available

ABOUT BESQ SYSTEMS

BESQ SYSTEMS is specialized in the state-of-the-art technology of networking & computing. It has been serving customers like US Navy, Lawrence Livermore National Labs, Bank of America, Stanford University, Fortune 500 companies nationwide for over five years. Call us today!

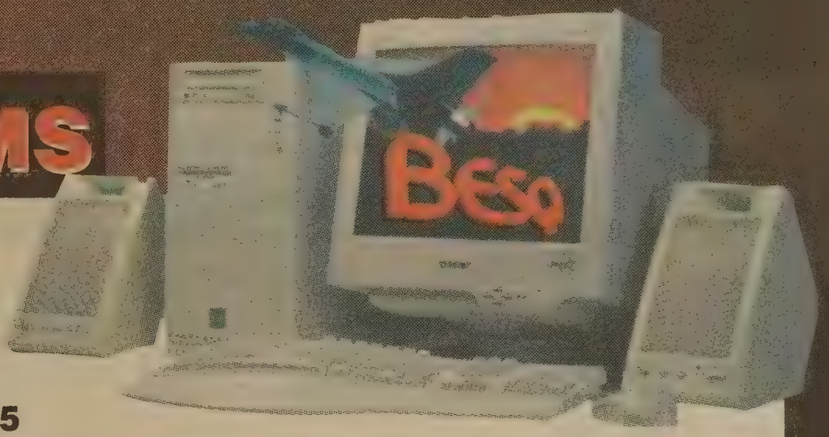
BUSINESS HOURS

M-F: 8:00am-5:00pm

SAT: 10:30am-4:30pm

VISA MasterCard

BESQ SYSTEMS



1-800-345-2377

Fax: 408-942-6160

www.besq.com

511 Montague Expressway, Milpitas, CA 95035

PII400BX PowerStation

Best Business System

- Intel Pentium II 400MHz Processor w/ MMX
- Intel SE440BX Motherboard 100MHz Bus w/ AGP
- Integrated 512K ECC L2 Cache
- 64MB SDRAM Memory 100MHz (384MB Max.)
- 8.4GB Ultra DMA Hard Drive/ 1.44MB Floppy
- ATI Xpert@Work 4MB Rage Pro AGP Video
- Creative DVD 20x 2 Kit MPEG-2
- HP C7200i CD ReWritable Drive
- ATX Tower Case w/ 235W UL Power Supply
- 104 PS/ 2 Keyboard/ Microsoft Intellimouse
- MS Windows 95/ Norton Anti Virus
- Video Conference Digital Camera Kit add $129
- 20" Viewsonic G800 1600X1280 Monitor add $919
- FREE **BUSINESS FIRST** Service Package

$2649 400MHz

Business Lease: $96/ Mo

Pentium II 350MHz	$2449
Pentium II 333MHz	$2289

PII233M PowerMachine

- Intel Pentium II 233MHz Processor w/ MMX
- Intel 440LX Chip Motherboard w/ AGP
- Integrated 512K ECC L2 Cache
- 32MB SDRAM Memory 10ns(64MB add $49)
- 3.2GB Ultra DMA Hard Drive(4.3GB add $50)
- 4MB SGRAM AGP Video Accelerator
- 24X CD ROM/ 1.44MB Floppy Drive
- 16- bit 3D Sound System/ 60W Speakers
- ATX Tower Case w/ 235W UL Power Supply
- 104 PS/ 2 Keyboard/ Logitech Mouse/ Windows 95
- FREE Lotus SmartSuite 97
- Free 15" .28 NI Monitor w/ Digital Control

Free Monitor

$989

Call for Business Financing

Pentium II 266MHz	$1039
Pentium II 300MHz	$1169

GX M2 PowerMachine

Sale

- CyrixGXM2-200 CPU w/ MMX
- 512K Pipelined L2 Cache
- 32MB SDRAM 10ns (256MB Max.)
- 2.1GB EIDE Hard Drive
- 24X CD-ROM/ 1.44MB Floppy Drive
- 1MB PCI SVGA Video
- 16-bit 3D Sound/ 60W Stereo Speakers
- Mini Tower Case w/ 230W Power Supply
- 104 PS/ 2 Keyboard/ Logitech PS/ 2 Mouse

Wow

$449

GX M2-233MHz	$469
GX M2-266MHz	$559

GS266S GroupServer

- Intel Pentium II 266MHz Processor w/ MMX
- Expandable to Dual Pentium II CPU's
- Gigabyte 686DLX Dual Pentium II Motherboard
- Integrated 512K ECC L2 Cache
- Integrated Adaptec 7880 U/ W SCSI Controller
- 64MB SDRAM Memory 10ns (512MB Max.)
- 4.3GB Ultra/ Wide SCSI-3 Hard Drives 8.5ms
- 24X CD ROM/ 1.44MB Floppy Drive
- 3Com 3C905B 10/ 100TX PCI NIC
- 2MB PCI SVGA Video Adapter
- ATX Tower Case w/ 235W UL Power Supply
- MS Windows NT 4.0 Server w/ 5 Client
- HP T41 4GB SCSI Tjape Backup System add $385
- 3Com Office Connect 8 Port 100BTX Hub add $367
- APC Smart-UPS add $389
- FREE **BUSINESS FIRST** Silver Level Service

$1999

Business lease: $72/ Mo

Call for Customized Configurations

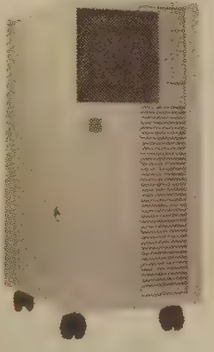
Best Value Server

PS2300 Enterprise Server

- Dual Intel Pentium II 333MHz Processors
- Intel R440LX Dual Pentium II Motherboard
- Integrated 512K ECC L2 Caches Per Processor
- 128 MB ECC SDRAM Memory 10ns(512MB Max.)
- THREE 4.3GB Ultra/ Wide SCSI-3 Hard Drives 8.5ms
- Adaptec AAA-131 Ultra/ Wide SCSI RAID Controller
- Integrated Adaptec 7880 Ultra/ Wide SCSI-3 Controller
- 24X CD-ROM/ 1.44 Floppy Drive
- Integrated Intel EtherExpress Pro/ 100Base TX NIC
- Integrated Cirrus Logic 5446 1MB Video RAM
- Server Class Tower w/ Dual Redundant 300W Power
- MS Windows NT 4.0 Server w/ 5 Client
- Intel LanDesk Server Manager Software
- HP C1599 4mm DAT 8GB SCSI Tape Backup add $769
- 19" Rack Mount Case At Same Price!
- FREE **BUSINESS FIRST** Gold Level Service

$5229

Business Lease: $190/ Mo



Network setup, installation & on site service

Serving you since 1990!

The CLS PII Super Value

Intel Pentium II 300 w/ 512K L2 Cache
LX440 Pentium II Motherboard
Mid-Tower AT Case w/ 230W Power Supply
32MB SDRAM
1.44MB FDD
4.3GB UDMA Hard Drive
AGP Graphic Accelerator w/4MB SGRAM
16-Bit Sound Chip on System Board
56K Internal Fax/Modem w/Voice
Serial Mouse, External Speakers
104 Win95 Keyboard
MS Win95 w/ Win98 Free Upgrade

$899

The CLS MMX Value

Intel Pentium MMX 233 CPU
TX-Pro Top Gun Pentium Motherboard w/ 1MB Cache
Mid-Tower AT Case w/ 230W Power Supply
32MB SDRAM
1.44MB FDD
3.2GB UDMA Hard Drive
PCI Graphic Accelerator w/ 4MB DRAM
16-Bit Sound Chip on System Board
56K Internal Fax/Modem w/Voice
Serial Mouse, External Speakers
104 Win95 Keyboard
MS Win95 w/ Win98 Free Upgrade
15" SVGA Color Monitor 0.28dpi

$799

EXECUTIVE OFFICE SYSTEM

LX 440 Pentium II motherboard
Medium Tower case w/ 230 watt power supply
64MB SDRAM
1.44MB Floppy Drive
4.3GB UDMA Hard drive
104 Keyboard for Win 95
Diamond Viper V330 with 4MB SGRAM AGP
Sound Blaster AWE 64 Sound Card
32XI CD Rom Drive
Internal 56K Fax/Modem w/Voice
Microsoft Win 95
External Stereo Speaker, Serial Mouse
17" SVGA Color Monitor, 0.28DPI N.I.

INTEL PENTIUM II 233MMX $1499
INTEL PENTIUM II 300 MMX $1699

HOME OFFICE SYSTEM

Pentium Motherboard w/ 512KB cache
Mid Tower case with 230 watt power supply
32mB EDO RAM • 1.44MB Floppy Drive
3.2GB UDMA Hard Drive
32XI CD ROM Drive
104 Keyboard for Win 95
PCI Graphic Accelerator w/ 4MB DRAM
16 Bit sound Card
Internal 56K Fax/Modem W/ Voice
Microsoft Win 95
External Stereo Speakers, Serial Mouse
15" SVGA Color Monitor, 0.28DP N.I.

AMD K6-200 & Intel MMX 200 CPU's . $849
AMD K6-233 & Intel MMX 233 CPU's . $949

Please Call for Everyday Low Prices on All CPUs, Memory and Hard Drives

MONITORS

15" SVGA N.I. 0.28 ..... $169	17" SVGA N.I. 0.26 ..... $339
17" SVGA N.I. 0.26 ..... $249	21" SVGA N.I. 0.28 ..... $799

MOTHERBOARDS

Triton 430TX Pentium® M/B w/512 Cache w/Built-in Sound Card..... $69
Pentium® TX Pro M/B w/512 Cache / 1MB Cache $56/69
FIC PA 2007/PA 2012 Pentium® M/B w/1MB Cache $95/99
ASUS Pentium® II P2L 97 M/B/BX 97 ..... $139/175

MODEMS

Internal 33.6/56K Fax/Modem w/Voice $39/59
US Robotics 33.6K Fax/Modem w/Voice (OEM)..... $89
US Robotics 56K Fax/Modem (OEM)..... $99
US Robotics 56K Fax/Modem w/Voice (OEM) $109

CASES

Mini Tower Case w/230 Watt Power Supply $19
Mid Tower Case w/230 Watt Power Supply $25
Medium Tower Case w/230 Watt Power Supply $35
Full Tower Case w/ 230 Watt Power Supply $59
ATX Medium Tower Case w/230 Watt ATX Power Supply... $59/69

MULTIMEDIA

ESS 1869 3D Stereo Sound Card 16 PnP..... $15
Creative Labs Sound Blaster 16/AWE64V..... $45/69
24X/32XI CD-ROM..... $59/79
Yamaha M7 / M15 Speakers..... $39 /59
OEM 60W / 200W / 240W / 320W Stereo Speakers..... $8.99 / 21.99 / 26.99 / 27.99

VGA CARDS

Trident 9680 PCI-2MB ..... $29 Matrox AGP 4MB..... $129
S3-Virge 3D 64 PCI-2MB ..... $39 Trident 9685 PCI 4MB $49
Diamond Stealth 4000AGP 4MB SGRAM.. $69 Trident Video 87 AGP 3D 4MB..... $59
Diamond Viper V330 w/4MB SGRAM... $129 ATI Expert at Play PCI 4MB SGRAM ... $169
Matrox Mystique II PCI 2MB/4MB ..... Call ATI 3D Expression 4MB DRAM..... $89

CLS INC.

510.354.0835
Fax: 510.440.9566
48521 Warm Springs Blvd., Suite 317
Fremont, CA 94539
Store Hours: Mon-Fri 10:00am to 6:00pm

Windows™ is a registered trademark of Mircrosoft Corporation. All systems come with 12-month parts & labor warranty. *Not responsible for any typographical error occurrences. Prices are subject to change without notice. •All prices shown are good for cash purchases only.

THE MEMORY OF A LIFETIME!

Memory with a Lifetime Warranty at Unbelievable Prices!

SOON TO BE SERVING YOU IN SAN MATEO

NOTEBOOK & PRINTER MEMORY

COMPAQ · apple · DELL · HEWLETT PACKARD · HITACHI · MICRONICS · IBM · TOSHIBA · NEC · SONY · TEXAS INSTRUMENTS · SHARP

& Much More!

CPUs

Intel Pentium 166MMX	$118
Intel Pentium 200MMX	123
Intel Pentium 233MMX	159
Pentium II 233MHz	299
Pentium II 266MHz	379
Pentium II 300MHz	597
Pentium II 333MHz	798
Pentium II 400MHz	898

PCMCIA, Notebook

FLASH CARDS

SRAM 1/2/4MB	$79/159/279
Compact Flash 8/15/30	99/139/299
ATA Flash Card 16/24/32MB	149/229/299

FAXMODEMS

Megahertz XJ1560	$229
Megahertz XJ1560 Cell	239

NETWORK

Intel EtherExpress Pro/100	159

168-Pin DIMMs

BUFFERED

EDO ECC 3.3V 32MB	$75
EDO ECC 3.3V 64MB	148
EDO ECC 3.3V 128MB	280
FPM or EDO 5V 32	61
FPM or EDO 5V 64	119

UNBUFFERED

SDRAM 3.3V 32MB	$55
SDRAM 3.3V 64MB	129
SDRAM 3.3V 128MB	249
SDRAM 3.3V ECC 32MB	65
SDRAM 3.3V ECC 64MB	149
SDRAM 3.3V ECC 128MB	287
EDO 32MB	59
EDO 64MB	119
EDO 128MB	219
EDO ECC 32MB	75
EDO ECC 64MB	129
EDO ECC 128MB	249

Batteries & AC Adapters

	Batteries for Notebooks	AC Adapters
Apple	From $49	From $65
Canon	From $60	From $65
Compaq	From $69	From $65
DEC	From $65	From $65
Dell	From $65	From $65
Gateway	From $65	------
HP	From $50	------
Hitachi	From $80	From $65
IBM	From $95	From $65
NEC	From $55	From $65
Sharp	From $38	From $65
Texas Inst.	From $68	From $65
Toshiba	From $48	From $65
And More		

We also have DC Car adapters for most Notebooks starting at $59. Please call for pricing & availability.

100MHz SDRAM

32MB 100 MHz SDRAM	$78
64MB 100 MHz SDRAM	$149
128MB 100 MHz SDRAM	$364
32MB MAC G3 SDRAM	$79
64MB MAC G3 SDRAM	$197
128MB MAC G3 SDRAM	$397

72-Pin SIMMs

EDO

4/8MB	$7/14
16/32MB	25/49
64/128MB	115/319

WITH PARITY

2/4MB	$5/13
8/16MB	25/34
32/64MB	59/159

NON-PARITY

4/8MB	$7/14
16/32MB	25/55
64MB	145

Trade-in Your 72-Pin for 168-Pin

30-Pin SIMMs

IBM MEMORY

1MB 1x9	$3
4MB 4x3/4x9	12/17
16MB 16x9	59

MAC MEMORY

1MB 1x8	$3
2MB 2x8	13
4MB 4x8	15
16MB 16x8	Call

SODIMMs

72-Pin SODIMM (Notebooks)

8MB 5V	$49
16MB 5V	79
32MB 3.3V	95

144-Pin SODIMM (Notebooks)

16/32MB 3.3V	$69/109

On-Site Installation for Corporations Available

SWEET MEMORY

www.sweetmemory.com

SANTA CLARA

FAX 408-654-9463

2450 Scott Blvd, Ste. 306
Santa Clara CA 95050
Hours: M-F 9-6 Sat 11-4

SAN FRANCISCO

FAX 415-288-9469

225 Bush St., Ste. 160
San Francisco, CA 94104
Hours: M-F 9-6 Sat 11-3

COMING SOON TO SAN MATEO

MasterCard VISA

NOT RESPONSIBLE FOR TYPOS. PRICES ON THESE ITEMS ARE CASH PRICES WITH MEMORY TRADE-IN. AVAILABLE ON MOST PRODUCTS, CALL FOR DETAILS. PENTIUM IS A TRADEMARK OF INTEL CORPORATION. PRICES SUBJECT TO CHANGE WITHOUT NOTICE. ALL PRODUCT OR COMPANY NAMES ARE TRADEMARKS OR REGISTERED TRADEMARKS OF THEIR RESPECTIVE COMPANIES. © COPY RIGHT 1996 SWEET MEMORY

Introducing

POLYWELL ALPHA

How does an Alpha with OpenGL running at 533MHz... for under $2995!* sound to you?!

CAD/CAM • ANIMATION • VIDEO EDITING • INTERNET/INTRANET • SQL SERVERS

GOLD SERIES

AlphaPowered™

Polywell offers Alpha-based systems designed to BLAST through the heaviest, most intense tasks you can throw at them!!
* (533 MHz Alpha CPU, 2MB Cache with 64MB ECC RAM, 4GB Ultra Fast Hard Drive, Open GL Accelerator Graphics Card & NT 3D Workstations)

So what are you waiting for?
Call today...if you feel the need for SPEED!

800.999.6649

Warranty and Support • 5-year In-House Labor • 2-Year Standard Parts
24-Hour Tech Support • Optional On-Site Service • 10-Year Toll-Free Support

Polywell Computers, Inc.

1461 San Mateo Ave. • South San Francisco, CA 94080, U.S.A.
Tel: (650) 583-7222 Fax: (650) 583-1974
Email: Info@polywell.com Web Site: www.polywell.com

AlphaPowered is a trademark of Digital Equipment Corporation

POLYWELL COMPUTERS

Polywell Systems Featuring Dual 400MHz Pentium® II Processors on 100 MHz Bus

Poly Quad Processor Server
4 x Pentium® Pro 200MHz Processor
128MB ECC RAM (exp. 1GB)
8.4GB Ultra SCSI HD
24X CD-ROM Drive, 3.5" FDD
2MB Graphics, 15" Monitor
10/100Mbit Fast Ethernet
10-Bay Tower, 400W Power
NT Server w/ 5-User License

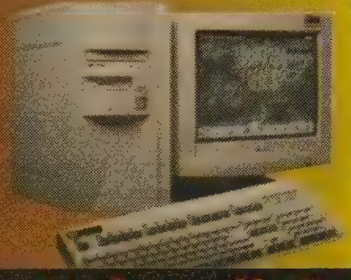
$9,995

Poly 8400BS2 2x400MHz Dual Processor Workstation
Poly 8400BS2 2x400MHz
Dual Processor Workstation
2 x 400MHz Pentium II Processor
128MB 100MHz SDRAM (Max.1GB)
8.4GB Ultra SCSI Hard Drive
32X EIDE CD-ROM DRIVE, 3.5" FDD
8MB AGP Open GL 3D Graphics
Ensoniq PCI 32-Bit Sound, Speakers
56K Fax/Modem and 100Mbit Ethernet
9-Bay Full Tower with Power Supply
NT Workstation CD & License

$3,995

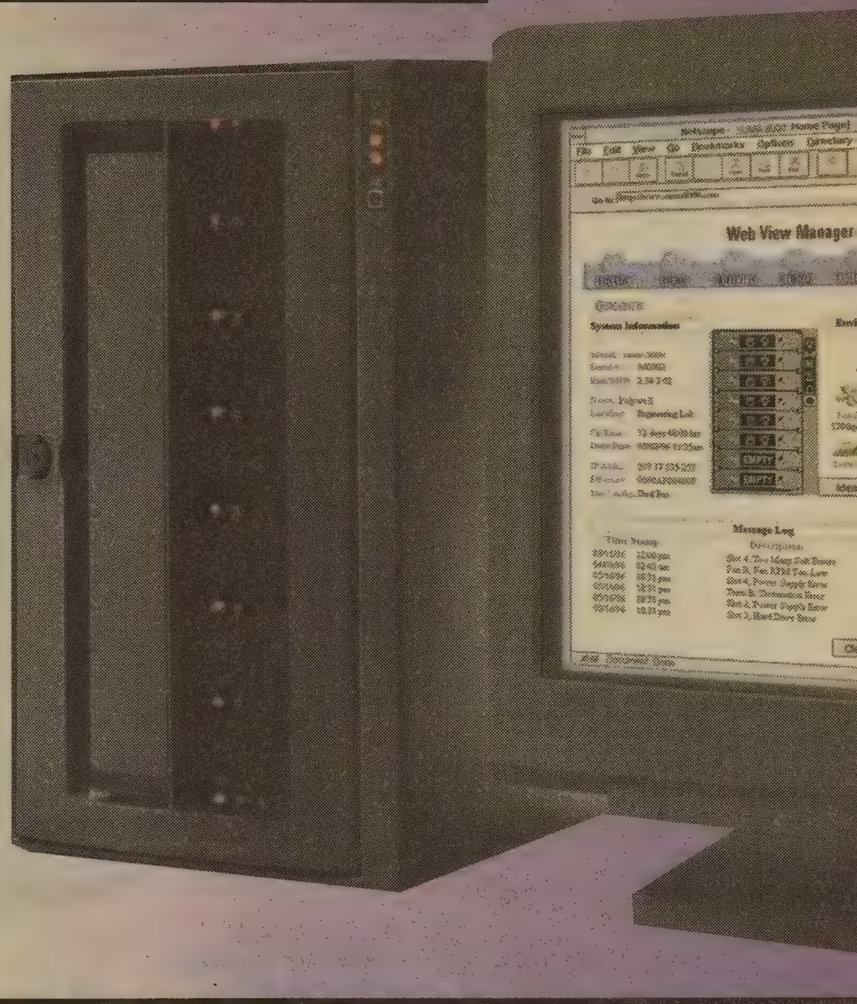
Poly 8400BX6 400MHz Professional PC/Workstation
Poly 8400BX6 400MHz
Professional PC/Workstation
400MHz Pentium II Processor
128MB 100MHz SDRAM
8.4GB Ultra IDE Hard Drive
32X EIDE CD-ROM Drive, 3.5"FDD
8MB AGP Open GL 3D Graphics
Ensoniq PCI 32-Bit Sound, Speakers
56K Fax/Modem/Voice Mail
Windows 95 CD and License

$2,495



Poly 7300BL6 300MHz Value PC with Power
Poly 7300BL6 300MHz
Value PC with Power
300MHz Pentium II Processor
64MB SDRAM (Max. 768M)
4.3GB Ultra IDE Hard Drive
24X EIDE CD-ROM Drive, 3.5" FDD
4MB RamBus AGP 3D Graphics
Ensoniq PCI 32-Bit Sound, Speakers
56K Fax/Modem/Voice Mail
Windows 95 CD and License

$1,195



Poly SUMA 8000 Disk Array

Internet Server, Database Server & Video Editing
- Up to 8X Hot Swappable Power Supply
- Up to 8X 4.3G or 9.1G Ultra Wide SCA HD
- Support RAID Level 0, 1, 3, 5, 7, 10
- Mylex SCSI-to-SCSI with up to 32MB Cache
- Hardware & Software Monitoring
- Web Browser Manager (Netscape/Explorer)
- RS-232, TCP/IP Management Interfaces
- E-Mail Notification, Telnet SNMP Support

Special Price for 20GB (5x4.3G) . . . . . Model Starts at $5,850

Delivers remote system management capabilities via the Intranet/Internet, including an innovative Web based console and SNMP agent. The SUMA 8000 goes well beyond convention RAID subsystems by offering unmatched value/functionality.

Monitor Options:

15"....$225 17".....$365 19".....$750 21".....$1150

Pentium® is a trademark for Intel, K6 for AMD, and UltraSparc for Sun. All trademarks used herein are the registered property of their respective owners

Polywell Computers, Inc.

1461 San Mateo Ave.
South San Francisco, CA 94080, U.S.A.

800.999.6649

(650)-583-7222
Fax: (650)583-1974
Since 1987

www.polywell.com
ftp.polywell.com
info@polywell.com

•5-year in-house labor warranty.

•First year/24 hour technical support & lifetime technical support during office hours.

•Optional on-site service also available.

MMX intel inside pentium® II PROCESSOR

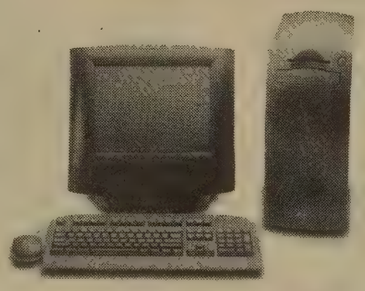
Acer Factory Outlet

SPRING SALE

Acer Aspire Refurbished Desktop model 1822R

- AMD-K6 233 MHZ mmx Enhanced
- 256K cache
- 16 MB EDO simm
- 2.1 GB Hard Disk Drive
- 24X maximum CD-ROM
- True 16 bit surround 3D sound card
- On board 64 bit ATI 3D Rage II with 1MB EDO video
- 33.6 Kbps modem
- Windows 95 OSR2 with 90 day depot warranty
- Regular MSRP $799.00 ON SALE FOR **$599.00**

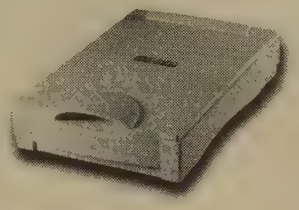
Acer Aspire Refurbished Minitower model 2177R



- Pentium II-266 MHZ mmx
- 512K L2 pipeline burst cache
- 32 MB SD RAM
- 4.3 GB Hard Disk Drive
- 32X maximum CD-ROM
- True 16 bit surround 3D sound
- On board ATI 3D Rage Pro AGP with 2MB SGRAM
- 56 Kbps KFlex modem
- Windows 95 OSR2 with 90 day depot warranty
- Regular $1299.00 ON SALE FOR **$999.00**

FCC regulations allow-up to 53 kbps downloading. Actual internet download speed depends upon local line conditions.

NOW AVAILABLE Acer Scan 610P



- Vivid image quality flatbed scanner with color enhancement technology
- 30-bit 600 X 1200 dpi optical, 9600 X 9600 dpi maximum
- High speed one pass scanning
- Parallel Port interface, supports EPP/ECP/SPP
- Twain-compliant driver for Win3.1/95/NT
- Bundled software: Ulead iPhoto plus Xerox Textbridge OCR
- 1 year warranty **$129.99**

We accept

Tel: 408-433-4903
Reseller Hotline: 408-922-5020
Fax: 408-383-9829

Open 11 a.m. to 6 p.m., Monday — Saturday

ACER

ACER Factory Outlet
520 Brennan Street, San Jose, CA 95131

• Quantities are limited • No other discounts apply • Sales ends on June 15,1998
• 90 day depot warranty, extended warranty available • Price subject to change without notice

WEB SERVICES!

InReach provides everything your company needs to establish a strong presence on the Internet quickly and easily. We can help you launch an interactive web site with multiple features without a hassle or huge commitment of resources. All of the basics are included in your choice of four straightforward, affordable packages.

- Microsoft FrontPage 98
- Chat Channels
- Full CGI Scripting
- Multiple T3 Lines
- Email at Domain Names
- Message Boards
- Traffic Reports
- Discussion Lists
- FTPsite Storage
- Password Protection
- Mailing Lists
- Auto Response Email
- Web-based Site Management
- Secure Back Up

800-4-INREACH
webservices.inreach.com webservices@inreach.com

INREACH internet

For more info on InReach's web services, please contact Elzo Williams at 800-611-8111 or email: elzo@inreach.com.

The Computer Magazine
MICROTIMES
www.microtimes.com

PUBLISHER *Harry Versen*

ADVERTISING (510)768-1200
NATIONAL ACCOUNT MANAGER: *Shelley Gordon*
ACCOUNT EXECUTIVES: *Brennan Beyer, Peter Foster, Marty Gillow, Wayne Green, Todd Halvorson*
CLASSIFIED ACCOUNT EXECUTIVE: *Larry Nusbaum*
MARKET MANAGER: *Jenifer Daggett*
CREDIT MANAGER: *Andres Rojas*
SALES ASSISTANT: *Deborah Tisdale, Peter Tsung*
SECRETARY/RECEPTIONIST: *Demi Farley*

EDITORIAL (510)768-1200
email: editors@microtimes.com
EDITOR: *Mary Eisenhart*
ASSOCIATE EDITOR: *Michael Robin*
ART DIRECTOR: *Rick Colby*
EDITORIAL DESIGNER: *Eleanor Carag*
EDITORIAL ASSISTANT: *Sara Tassione*
NEWS EDITOR: *Paul Hoffman*
CONTRIBUTING EDITORS: *Jennifer R. Cherniss, John C. Dvorak, Jonathan E., Bennett Falk, Bill Gram-Reefer, Ed Kahn, Robert Moskowitz, Douglas J. Nakakihara, Fabian Pascal, John S. Quarterman, Tony Reveaux, David A. Simon, CPA, Birrell Walsh, Jim Warren*
CONTRIBUTING WRITERS: *Lenny Bailes, Laura Bell, Ivars Bezdechi, Cynthia Dyer-Bennett, Anna Couey, Matthew Leeds, Woody Liswood, Pamela Mason, Herb Mendelsohn, Michelle Rafter, Kevin Savetz*
CONTRIBUTING PHOTOGRAPHERS: *Jay Blakesberg, Tustin Ellison, Michael Jay, Anne Knudsen, Ann Summa*

INFORMATION SYSTEMS
TECHNICIAN: *Warren Raddatz*

PRODUCTION (510)768-1200
Services provided by Electronic Graphics Group-West, a division of HPC
DIVISION PRODUCTION MANAGER: *Amy Marson*
PRODUCTION SERVICES SUPERVISOR: *Kevin Price*
PRODUCTION TEAM MANAGER: *Randy Atwood*
AD COORDINATORS: *Kay Simmons, Jesse Sullivan*
PRODUCTION STAFF: *Jay Olson, Linda Peterson, Heather Porter, Mark Wortman*
QUALITY CONTROL: *Mary Knappenberger*

DISTRIBUTION (510)489-7616
Distribution provided by DistribuTech, a division of HPC
GENERAL MANAGER: *Ken Morrison*
REGIONAL MANAGER: *Steve Holm*

HPC, INC. CORPORATE OFFICES
CEO, PRESIDENT: *Robert C. Metz*
SENIOR V.P., DIRECTOR OF PUBLICATIONS: *Gary W. Austin*
NATIONAL MARKETING MANAGER: *Robert Hammond*
V.P., DIRECTOR OF DISTRIBUTECH: *David S. Crawford*
V.P., DIRECTOR OF PRODUCTION: *Randolph F. Brunner*

PRIMEDIA INC.
William Reilly CHAIRMAN & CEO
Jack Farnsworth PRESIDENT, INFORMATION GROUP
FOUNDERS: *Dennis Erokan, Don Hamilton, Pat Hamilton*

BPA INTERNATIONAL

This Vol. 14 No. 6 May 20, 1998, Whole No. 179. MicroTimes, California's Computer Magazine, is published by HPC, Inc., a PRIMEDIA Company. Bay Area Office: 1300 Clay St., Ste. 820, Oakland, CA 94612. Phone Advertising Office (510)768-1200. Fax (510)768-1288. email *sales@microtimes.com* . Los Angeles Office, 55 S. Lake Ave., Ste. 540, Pasadena, CA 91101. Phone (626)584-9155. Fax (626)584-9157. Anaheim Office, 801 East Katella Ave., Suite #210, Anaheim, CA 92805. Phone (714)939-2809. Fax (714)978-6135.

Reproduction in whole or in part without permission of Publisher is strictly prohibited. The staff and management of MicroTimes do not advocate or encourage the use of any product or service advertised herein for illegal purposes.

Reaching the Internet is Easy

With local access everywhere in California and fast 56K connections, reaching the Internet with InReach *is* easy. Guaranteed.

Get on the Internet Quickly and Easily

InReach offers you a complete Internet connection kit that includes a **FREE CD-ROM** that sets up automatically to get you online in minutes, plus a **FREE 128 page Internet book**.

Whether you are new to the Internet or just want to switch providers, InReach makes your choice simple with our FREE connection kit and a **30 day money-back guarantee**. Try us today, risk free.

Powerful Features at a Great Price

InReach provides you with the fastest connections possible, supporting both types of **56K modems**, K56flex and x2. You also get all the other services you expect, including **10 megs of web space**, online gaming, news and chat rooms right on the web, toll-free technical support, and much more. **Unlimited, local access statewide** is only $19.95 a month, with a one-time $19.95 setup fee.

Business Packages and Customized Solutions

Put your business on the Internet with our reliable, professional services. InReach's business services include **web hosting** and **email at domain names** (www.yourbusiness.com and you@yourbusiness.com), high speed **dedicated lines** from Frame Relay to T-3 connections, and **server co-location**. Call us today to find out more about how you can reach the Internet!

Call today for your FREE Software without obligation!

ASCEND K56 flex CONNECT with Rockwell

800-4-INREACH

www.inreach.com info@inreach.com 800-446-7322

INREACH internet

MEDIA ON™

AGENDA BUSINESS

- Intel® Pentium® II Processor
- LX440 MB w/LDCM, USB
- 64MB SDRAM DIMM
- 8.4GB Ultra IDE Hard Drive
- Matrox Productiva G100 8MB AGP Graphics Card
- AUREAL A3D PCI Sound Card with 128 Voice Wavetable
- 200 Watt Stereo Speakers
- 32X CD-ROM
- US Robotics 56K V.90 Fax Modem
- 104 Keyboard /PS2 Mouse
- 1.44MB Floppy Drive
- Iomega ZIP Drive
- ATX Mini-Tower Case w/235 Watt Power Supply
- Microsoft Windows 95
- 15" .28 DPI Color Monitor w/OSD (13.8 Viewable)

Pentium® II Processor 233Mhz	$1299
Pentium® II Processor 266Mhz	$1369
Pentium® II Processor 300Mhz	$1529
Pentium® II Processor 333Mhz	$1599

AGENDA HOME

- Intel® Pentium® II Processor
- LX440 MB w/LDCM, USB
- 64MB SDRAM DIMM
- 6.4GB Ultra IDE Hard Drive
- Matrox Productiva G100 8MB AGP Graphics Card
- AUREAL A3D PCI Sound Card with 128 Voice Wavetable
- 200 Watt Stereo Speakers
- 32X CD-ROM Drive
- US Robotics 56K V.90 Fax Modem
- 104 Keyboard /PS2 Mouse
- 1.44MB Floppy Drive
- ATX Mini-Tower Case w/235 Watt Power Supply
- Microsoft Windows 95
- 19" .26 DPI Color Monitor w/OSD (18" Viewable)

Pentium® II Processor 233MHz	$1649
Pentium® II Processor 266MHz	$1719
Pentium® II Processor 300MHz	$1879
Pentium® II Processor 333MHz	$1949

www.mediaon.com

Note, Intel Inside Logo and Pentium are registered trademarks and MMX is a trademark of Intel Corporation. All other names are properties of their respective corporations. Price and specifications are subject to change without notice. Not responsible for typographic error.

Keeping you in the game.

MEDIA ON™

EXPERT II

- Intel® Pentium® II Processor
- LX440 MB w/LDCM, USB
- 64MB SDRAM DIMM
- 6.4GB Ultra IDE Hard Drive
- Matrox Productiva G100 4MB AGP Graphics Card
- AUREAL A3D PCI Sound Card with 128 Voice Wavetable
- 200 Watt Stereo Speakers
- 32X CD-ROM Drive
- US Robotics 56K V.90 Fax Modem
- 104 Keyboard /PS2 Mouse
- 1.44MB Floppy Drive
- ATX Mini-Tower Case w/235 Watt Power Supply
- Microsoft Windows 95
- 17" .26 DPI Color Monitor w/OSD (16" Viewable)

Pentium® II Processor 233MHz	$1369
Pentium® II Processor 266MHz	$1439
Pentium® II Processor 300MHz	$1599
Pentium® II Processor 333MHz	$1669

AGENDA BUSINESS PRO

- Intel® Pentium® II Processor
- BX440 Chipset MB w/LDCM, USB
- 128MB SDRAM DIMM
- 8.4GB Ultra IDE Hard Drive
- Matrox Productiva G100 8MB AGP Graphics Card
- AUREAL A3D PCI Sound Card with 128 Voice Wavetable
- 200 Watt Stereo Speakers
- 32X CD-ROM Drive
- US Robotics 56K V.90 Fax Modem
- 104 Keyboard /PS2 Mouse
- 1.44MB Floppy Drive
- Iomega ZIP Drive
- ATX Mini-Tower Case w/235 Watt Power Supply
- Microsoft Windows 95
- 17" .26 DPI Color Monitor, w/OSD (16" Viewable)

Pentium® II Processor 350MHz	$2355
Pentium® II Processor 400MHz	$2555

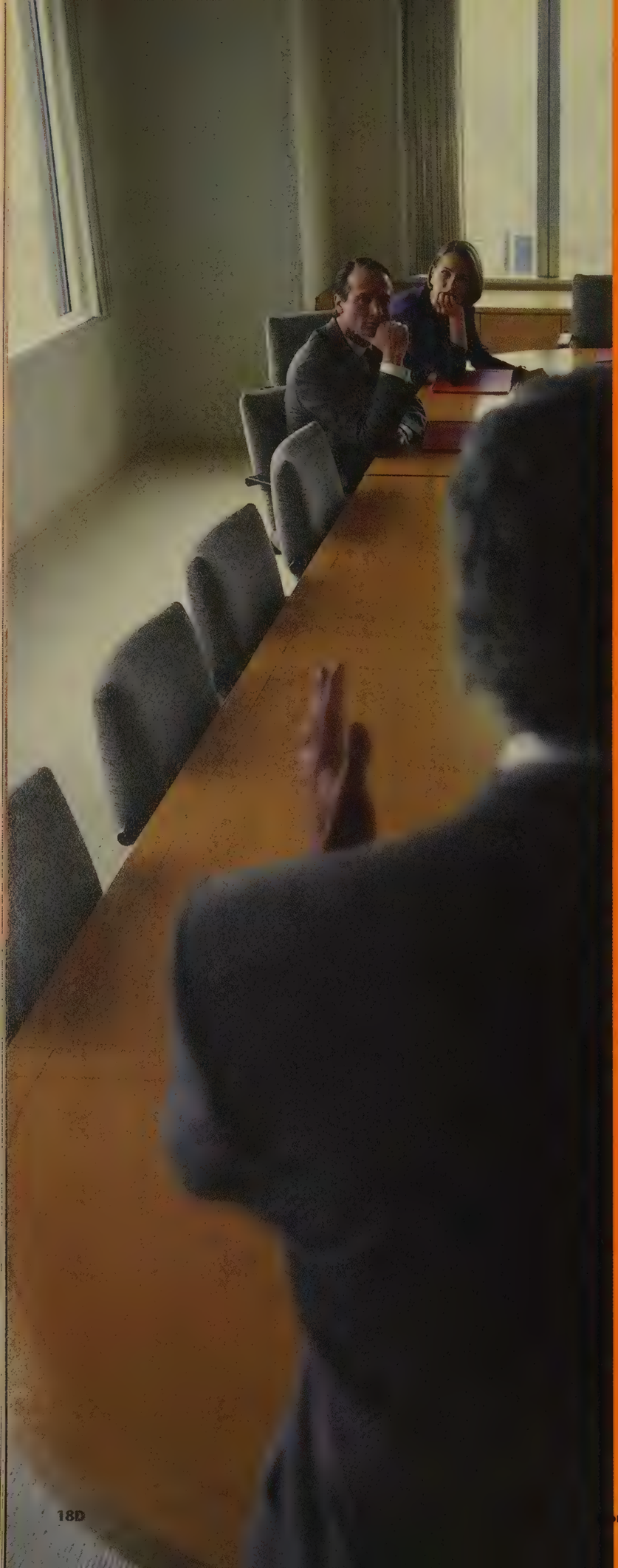
• 2-year limited warranty / 2-year labor

47257 Fremont Blvd. Fremont, CA 94538

TEL: 510-490-7998

FAX: 510-490-8286

MMX™ intel inside pentium® II PROCESSOR



We Mean
We Offer Total

MicroQuest
CYBEREXPRESS

- Intel® Pentium® II Processor featuring MMX™ Technology-233MHz
- 32MB RAM
- 5.2GB EIDE Hard Drive
- 24X CD-ROM Drive
- 56K Internal Modem
- 4MB AGP Video Card
- 15" SVGA Monitor
- Creative Labs AWE64 Sound
- 320-Watt Stereo Speakers
- 1.44 Floppy Drive
- Medium-Tower Case w/UL Power Supply
- 104 Windows 95 Keyboard
- Microsoft Mouse
- Windows 95 Installed w/CD Included
- Microsoft Internet Explorer 4.0
- FCC Class-B Certified

$1350

MicroQuest
XPRESS WORKSTATION

- Intel® Pentium® Processor with MMX™ Technology-200MHz
- 16MB RAM
- 2GB Hard Drive
- 24X CD-ROM Drive
- 33.6 Internal Modem
- 16-Bit Sound Card
- Amplifed Stereo Speakers
- 2MB PCI Video Card
- 1.44 Floppy Drive
- Mini-Tower or Desktop Case w/UL Power Supply
- 104 Windows 95 Keyboard
- Serial Mouse
- Windows 95 Installed w/CD Included
- FCC Class-B Certified

$595

U-tron
TECHNOLOGIES

1-800-933-7775

Business...

Business Solutions

MicroQuest

ULTRA SERVERS

Server Solutions You Can Count On!

With U-tron's expert support and service, you get the proven performance and reliability to suit your needs. We proudly offer U-tron ULTRA SERVERS based on Intel® Server Bare Bone Server Configurations. All ULTRA SERVERS feature Intel® Pentium® II Processors.

MicroQuest

ULTRA SERVER Options

- Intel® Server Motherboard
- Up to two Pentium® II processors
- 266 or 300 MHz performance with 512K cache per processor
- Low-cost, built-in RAID support using on-board ultra SCSI and I960
- Support for up to 512MB of ECC-protected EDO or SDRAM standard DIMM
- Redundant power and cooling options
- Hot-swap disk and power supplies
- LANDest Server Manager software and optional hardware
- Nine expansion slots (6 PCI, 2 ISA, 1 shared)

MicroQuest

ULTRA SERVER Applications

- Mail Servers
- Application Servers
- Intranet Servers
- Web Servers

Custom Configuration Specialist

CALL US FOR CUSTOM PRICE QUOTE!

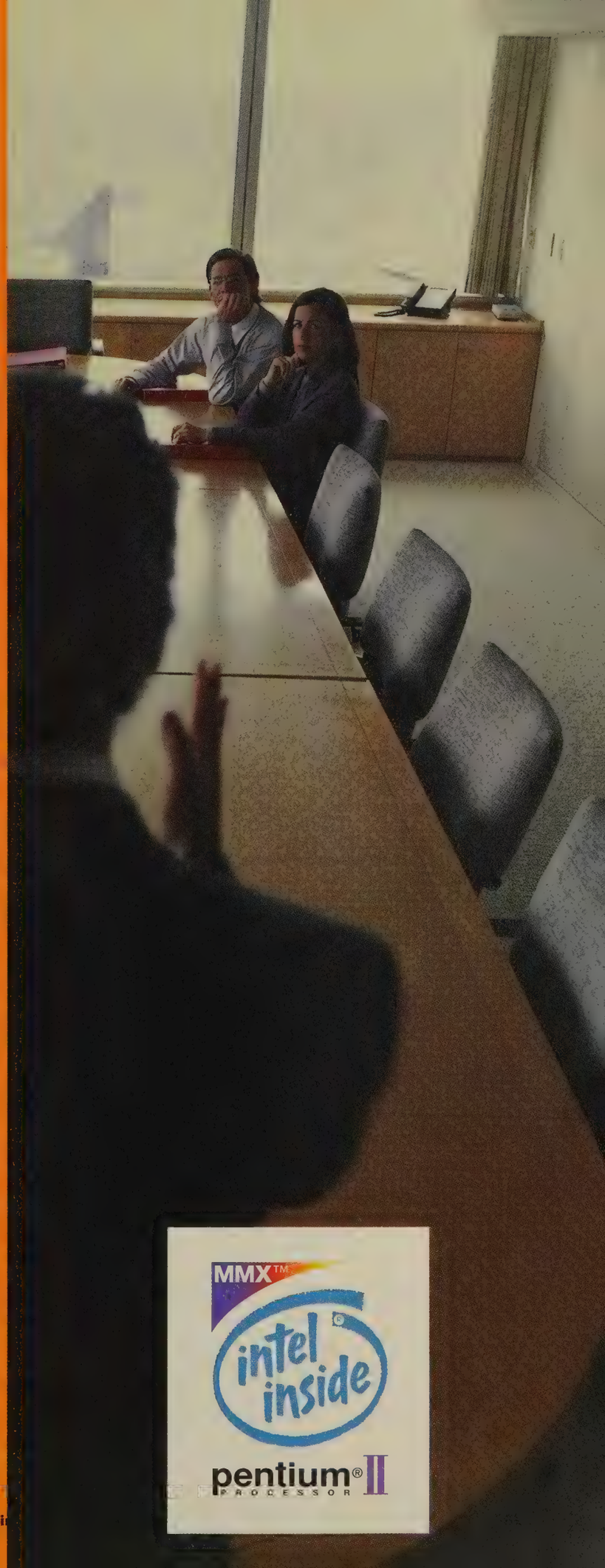
Special Corporate, Government & VAR Programs

45545 Northport Loop East • Fremont, CA 94538

1-800-933-7775

Corporation. All other names are properties of their respective corporations. Price and specifications are subject to change without notice. Not responsible for typographic error.

May 20, 1998 • Mention MicroTi



Attention MIS & IS Specialists!

We have the most advanced Network System with Auto-Wake-Up Network Card!

MicroQuest

SMART XPRESS WORKSTATION

- Intel® Celetron™ Processor -266Mhz
- Slot One Advanced Technology Solution
- 32MB SDRAM
- 2.0GB EIDE Hard Drive
- 4MB AGP Video Card
- Auto-Wake-Up Network Card
- 24X CD-ROM
- 16-Bit Sound Card w/Speakers
- 1.44 Floppy Drive
- ATX Mid-Tower Case
- PS/2 Keyboard/Mouse
- MS Windows 95 Installed w/CD

$795

Introducing the most Advanced "Home Office Solution" w/Auto wake up Fax Modem!

MicroQuest

SMART CYBERXPRESS jr.

- Intel® Celetron™ Processor -266Mhz
- Slot One Advanced Technology Solution
- 32MB SDRAM
- 2.0GB EIDE Hard Drive
- 4MB AGP Video Card
- 56K Auto-Wake-Up Modem
- 15" SVGA Monitor
- 24X CD-ROM
- 16-Bit Sound Card w/AmplifiedSpearkers
- 1.44 Floppy Drive
- ATX Mid-Tower Case
- 104 Windows 95 Keyboard, PS/2 Mouse
- MS Windows 95 Installed w/CD
- FCC Class-B Certified

$999

intel inside
celeron™
PROCESSOR

U-tron
TECHNOLOGIES

1-800-933-7775

Your Network & System Upgrade Partner

At U-tron our service staff can provide your business the right solution.
Our engineering staff is trained in the latest technology..

- Upgrade to Windows NT Systems
- System Upgrades
- Server Upgrades
- Walk-in Service Center
- Complete Hardware Upgrades
- On-site Service and Repairs

CALL US For An Appointment TODAY!
Custom Configuration Specialist

MicroQuest

Ultra Server Model 300

Perfect for File Sever, Intranet/Internet & Mail Applications
Ideal for up to 50 Users, easy to manage and upgrade

- Intel® Pentium® II Processor - 266Mhz
- "Redwood" Dual Pentium® Processor II Motherboard with 440LX Chipset
- Columbus II Chassis
- 5 Slots, 4 PCI, 1 ISA
- Ultra Wide SCSI
- Integrated Intel Pro 100 NIC
- Intergrated Graphics
- LANDesk Server Manager Software
- 4GB SCSI Hard Drive
- 64MB SDRAM
- 20X Variable SCSI CD-ROM Drive

Starting at **$1799**

Windows NT 4.0 10-User Software add $595

MicroQuest

Ultra Server Model 1000

Handles up to 150 Users, Perfect for Mission Critical Applications, Intranet/Internet & Mail Applications, Lots Headroom built-in!

- Intel® Pentium® II Processor - 300Mhz
- SDRAM Memory Motherboard with 440LX Chipset
- 9 Slots, 6 PCI, 2 ISA, 1 Shared
- Dual Ultra Wide SCSI and Ultra Narrow
- i960 Controller for RAID (RPX)
- 5 Hot Swap Drive Bays
- Redundant Power Supplies
- 20X Variable SCSI CD-ROM Drive
- ••Chassis Intusion Alerting
- LANDesk Server Manager Software
- 4GB Ultra SCSI Hard Drive SCA Connector
- 128MB ECC SDRAM
- Cirrus SVGA Graphics

Starting at **$6995**

45545 Northport Loop East • Fremont, CA 94538

1-800-933-7775

Intel, Intel Inside Logo and Pentium are registered trademarks. MMX and Celeron are trademarks of Intel Corporation. All other names are properties of their respective corporations. Price and specifications are subject to change without notice. Not responsible for typographic error.

SYSTEMS THAT PERFORM TO PRECISION SPECIFICATIONS

BOLData™ Adventure Series Workstations

Built with Intel® Pentium® processors with MMX™ technology, Pentium® II processors and the *ALL NEW* Intel® Celeron™ processors

Adventure Classic

- Motherboard with TX Pro II PCI Chipset
- On-Board 512K of Pipelined Burst SRAM Cache
- 32MB Fast SDRAM Memory
- Integrated 64-bit Accelerated Video Graphics
- 2.1GB Ultra DMA Hard Disk Drive
- 24X IDE CD-ROM Drive
- Integrated Yamaha OPL4-ML 3D Wavetable Audio
- 1.44 Floppy Disk Drive
- Mid Tower Case with 230 Watt Power Supply
- Mitsumi 104 Key Enhanced Keyboard
- Logitech Mouse
- 80 Watt Stereo Speakers
- Microsoft® Windows® 95 CD-ROM
- Fully Tested and Burned In

200Mhz Intel® Pentium® processor with MMX™ Technology $599

233Mhz Intel® Pentium® processor with MMX™ Technology $639

Only $599!

Adventure Star-2

- AGP Motherboard with Intel® 440LX chipset and USB
- 64MB Fast SDRAM Memory
- Trident 3D Image 9750 AGP Graphics Adapter w/4MB SGRAM
- 4.3GB Ultra DMA Hard Disk Drive
- 24X IDE CD-ROM Drive
- Onboard 3D Sound Pro
- 1.44 Floppy Disk Drive
- 56.6K Fax/Modem
- Mid Tower Case with 230 Watt Power Supply
- Mitsumi 104 Key Enhanced Keyboard
- Logitech Mouse
- 80 Watt Stereo Speakers
- Microsoft® Windows 95 CD-ROM
- Fully Tested and Burned In

266Mhz Intel® Celeron™ processor $799
233Mhz Intel® Pentium® II processor..... $855
266Mhz Intel® Pentium® II processor..... $905
300Mhz Intel® Pentium® II processor $1,050
333Mhz Intel® Pentium® II processor $1,205

Adventure Ultra

- Intel® AL440LX AGP Motherboard with USB
- 64MB Fast SDRAM Memory
- ATI Xpert@Work AGP Video with 4MB SGRAM
- 6.4GB Ultra DMA Hard Disk Drive
- 32X Toshiba IDE CD-ROM Drive
- Intergrated Yamaha OPL3-SA3 Audio
- 1.44 Floppy Disk Drive
- Zoltrix 56.6 Fax/Modem with Voice Mail and Speakerphone
- Mid Tower Tool-Free Case with 235 Watt Power Supply
- Mitsumi 104 Key Enhanced PS/2 Keyboard
- Microsoft® PS/2 Mouse
- 80 Watt Stereo Speakers
- Microsoft® Windows 95 CD-ROM
- Fully Tested and Burned In

266Mhz Intel® Celeron™ processor $1,095
233Mhz Intel® Pentium® II processor $1,145
266Mhz Intel® Pentium® II processor $1,200
300Mhz Intel® Pentium® II processor $1,340
333Mhz Intel® Pentium® II processor $1,505

Copyright © 1998, BOLData Technology, Inc. Pricing and specifications subject to change without notice. BOLData, the BOLData logo, Adventure Classic, Adventure Star-2, Adventure Ultra and Adventure Xtreme are trademarks of BOLData Technology, Inc. The Intel Inside logo and Pentium are registered trademarks and MMX and Celeron are trademarks of Intel Corporation. All other product or company names are the trademarks or registered trademarks of their respective owners.

Adventure
Xtreme

- New 100MHz System Bus Intel® SE440BX Motherboard with USB
- 64MB Fast SDRAM Memory
- New Intel® i740 based AGP 3D Graphics Accelerator with 8MB SDRAM
- 6.4GB Ultra DMA Hard Disk Drive
- DVD II ROM Drive with MPEG II DVD Decoder Card
- Integrated PCI Crystal 3D Wavetable Audio
- 1.44 Floppy Disk Drive
- Zoltrix 56.6 Fax/Modem with Voice Mail and Speakerphone
- Mid Tower Tool-Free Case with 235 Watt Power Supply
- Mitsumi 104 Key Enhanced PS/2 Keyboard
- Microsoft® PS/2 Mouse
- 80 Watt Stereo Speakers
- Microsoft® Windows 95 CD-ROM
- Fully Tested and Burned In

333Mhz Intel® Pentium® II processor $1,599
350Mhz Intel® Pentium® II processor $1,739
400Mhz Intel® Pentium® II processor $1,999

Choosing the right system means finding the right components at the right price. At BOLData, we take the guess work out of finding the right system by building our Adventure Series™ systems with industry proven components. With a proven track record of offering rock solid performance at an affordable price, BOLData is your number one source for systems and peripherals. Call BOLData today for all your system needs. **1-800-923-BOLD**

VISIT US ON THE WEB
www.boldata.com
YOUR PARTNER FOR SUCCESS

BOLData™
SYSTEMS

1-800-923-BOLD
(1-800-923-2653)

MT980520

Fremont • Toronto • Taipei • Hong Kong • Singapore • Dusseldorf

Your Trash

Our Mission:

To help reduce the level of poverty by providing education, technical training and employment opportunities in the computer industry through the recycling and refurbishing of used computer equipment.

How You Can Help

You can help by donating your tax-deductible surplus equipment to the MCRC. We accept just about everything:

* IBM-Based Equipment
* Macintosh Equipment
* Printers
* Main Frames
* Telecommunications Equipment
* Parts and Components
* Cables

We Meet Our Donor's Needs By:

* Accepting all unwanted computer and related equipment, working or non-working
* Arranging prompt pickup at your company or facility (most locations)
* Assembling working systems using parts from non-working systems
* Reformatting every hard drive; your data will be destroyed
* Maintaining all computers that we place and fielding any questions
* Allowing parts of larger donations to be designated to a chosen charity

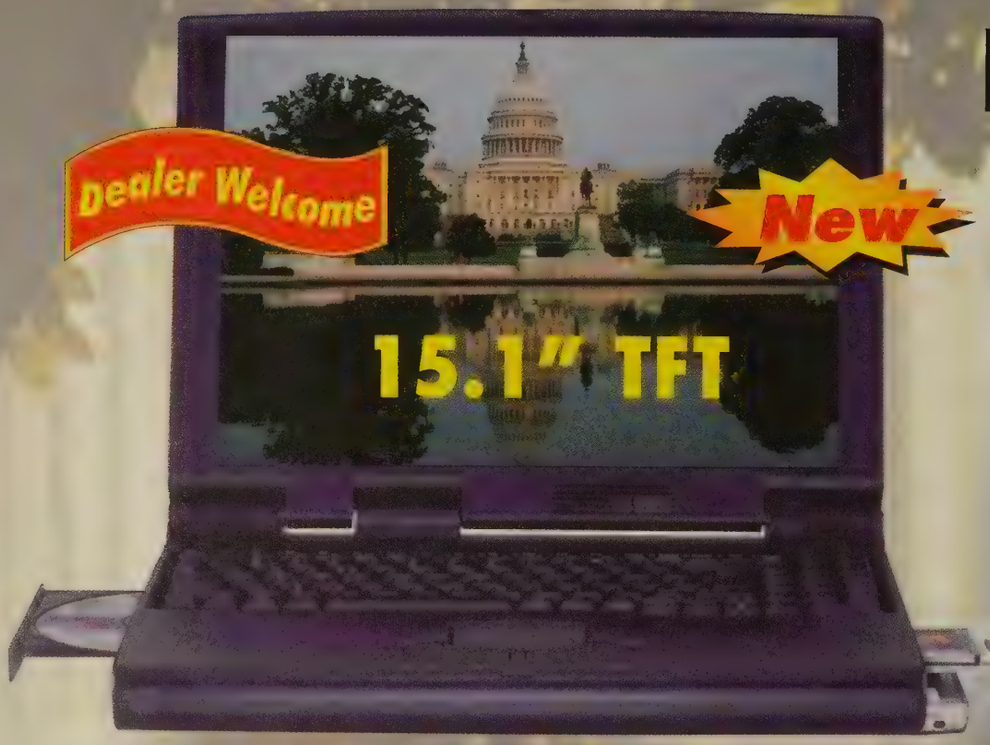
RECYCLE - RECYCLE - RECYCLE - RECYCLE

THEIR TRAINING

Marin Computer Resource Center
www.mcrc.org mcrc@pacbell.net
to make a donation call 415-454-4227

Multimedia Notebook

RIXBOOK proudly introduces the world's first 15.1" TFT LCD Notebook...



RIX 8-Series

- 15.1" 1024 x 768 XGA TFT LCD
- 102-Key Keyboard with Numeric Keypad
- 512KB L2 Pipeline-Burst Cache
- 64-bit 3D 4MB SGRAM Graphic Accelerator
- Intel Pentium® Processor with MMX Technology
- 3.5" 1.44 MN FDD Exchangeable with Optional LS-120, Iomega Zip Drive, or 2nd HDD
- 20 x CD-ROM Drive Exchangeable with Optional MO Drive
- 3D Surround Sound with 1MB Hardware Wavetable
- 2 Stereo Speakers & 1 Microphone
- Built-in Touchpad Pointing Device
- 2 Type II or 1 Type III PCMCIA Slot Support ZV Port & Card Bus
- 75.6 W Lithium-Ion Battery
- 1 Video-in Jack supports Video Capture
- Ports: 2 USB, 1S, 1P, TV-out, Ext. Keyboard, Ext. CRT and FIR Infrared

RIX 6-Series

- Intel Pentium® CPU (100 – 233MMX Technology)
- DRAM Expandable to 128MB EDO
- 512KB Synchronous Second Level Cache
- 12.1" SVGA TFT LCD
- 64-Bit PCI bus Video with Graphics Accelerators
- 2MB Video Display Memory
- 2 Type II PCMCIA slots
- Built-in 20 x CD-ROM Drive
- Removable 2.5" PCI Local Bus IDE Hard Drive
- Removable 3.5" F.D.D, Interchange with 2nd Battery
- 16-Bit Sound Blaster Compatible Audio IrDA and FIR, Data Transfer Rate up to 4M bits
- Built-in TrackPad
- Li-Ion Battery or NiMM Battery
- 3D Sound. Full Duplex

Special

- All-in-One RIXBook 6100
- 12.1" Active Matrix
- 233MMX
- 32MB EDO RAM Drive
- 2.1 HDD
- 20 x CD-ROM
- 1.44 Floppy Drive
- AC Adapter
- Carrying Case
- 33.6 PCMCIA Fax Modem
- NiMH Battery
- Windows95 - Including CD*

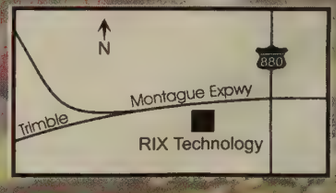
1395**

MMX™ intel inside pentium PROCESSOR

MICROSOFT WINDOWS 95

* **Microsoft OSR 2.5 version w/real-sensitive security strip.**

** **Special price for education institution, government agency & non-profit organizations.**



RIX Technology, Inc.

780 Montague Expressway, Suite 306, San Jose, CA 95131
Tel: (408)953-0788 Fax: (408)953-0799 hptt://www.rixbook.com

OFFICE HOUR
Mon-Fri: 9:00am-6:00pm
Sat: 9:00am-12:00pm
(By appointment)

1-800-RIX-0788

RIX TECHNOLOGY, INC, All right reserved. all company and/or product names mentioned herein are trademarks and/or registered trademarks of their respective companies. Price and specification are subject to change without notice. Not responsible for typographic errors.

HIQ Advanced Network Solutions

Networking **Sales** **Installation** **Service** **Support**

Servers/Workstations
Compaq
Digital Equipment
HiQ Server
HP
IBM
Intel

Networking
3Com
Bay Networks
Cisco Systems
Digital Equipment
HP
IBM
Ramp

Printers
CIE America
Datasouth
Digital Equipment
Genicom Corporation
HP
IBM
Lexmark
Mannasman Tally
Xerox Zebra

HEWLETT PACKARD
digital
IBM Business Partner
Cisco Systems Reseller
COMPAQ
Microsoft Certified Solution Provider
3Com net Working Partners program
FUJITSU
FUJITSU PC CORPORATION
Novell. Authorized Partner PartnerNet.
Find out about X Technology
3Com
ramp NETWORKS
MultiTech Systems
adaptec
intel
digital Network Products

Communications
3Com
Adtran
IBM
MultiTech Systems
Microcom
Paradyne
Practical Peripherals

Services
Network Installation
Computer Repair
Help Desk

Network Design
LAN/WAN Networks
Spread Spectrum

Network Cabling
Category 5
Multi Mode Fiber
Thin/THick Net
Lifetime Guarantee

World Wide Web
Home Page Desinging/Hosting
Internet Communication/ISP Service
Intranet Design

Files & Printers Sharing, and Backup-Server Solution:

Based on the Microsoft Windows NT or Microsoft Windows 95 operating system, your office will now be able to share data as well as have access to resources over the network, such as printers. Even more, your company's vital data will be protected via the backup-recovery solution and maximize system uptime and performance.

Fax-Server Solution:

Now via one line and one modem, every workstation in the office can send and receive faxes from their desktop application. No more waiting in line, no more wasted time re-dialing due to a busy signal, no more hand-written cover pages. This solution can be expanded in the future by building a modem pool to allow simultaneous fax and dial-up networking for multiple users.

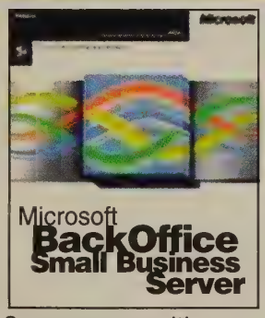
Internet, E-mail, Remote-Access Solution:

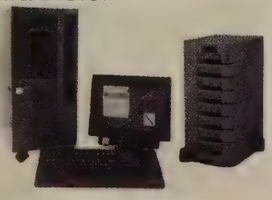
Whether you require dial-up access, ISDN or the T1 line, HiQ can supply and support the best Internet-access solution for your needs. Leverage your time and resources by accessing the power of the Web when researching information about products, your customers, and your competition! Communicate internally, and externally with your customers and vendors via e-mail. Access your company's servers remotely to stay in touch even if you are not physically there.

Free technical on-site consultation is available with qualification

HiQ B.O.S. Server

With MS BackOffice Small Business Server pre-installed, HiQ B.O.S. Server is ideal for small-business as Internet gate-way, e-mail server, and RAS. Powered by Intel Pentium® II 233MHz CPU, HiQ B.O.S.





Server comes with 64MB of RAM, a 4.3GB EIDE HDD, 24X CD-ROM Drive, 3Com 3C905 Netcard, USR 56K MDM and much more.

WebRamp Solution

Give anyone simultaneous Internet access plus remote dial-in and a built-in 4-port hub — all in one product. Use 1–3 standard modems or ISDN to get up to 165K speed, WebRamp is a perfect solution for small offices without a network administrator.

ramp NETWORKS™

HiQ RAID Server

Applying RAID protection to your mission-critical data, HiQ has solutions. Configured with an ASUS P2I97-DS motherboard, Intel Pentium II 300 CPU, 128MB SDRAM, 3 Fujitsu 4GB UW SCSI HDD, Adaptec AAA131CA Raid Controller. HP 1599 8GB Tape Drive, APC 1000XL Smart UPS, and a 32X IDE CD-ROM drive gives you options for different levels of RAID protection.

HIQ

www.hiq.com

Call 408-328-0278 to schedule a free on-site consultation

Cisco Systems Reseller
3Com net Working Partners program
IBM Business Partner

HIQ

NETWORK SOLUTIONS CENTER

SUNNYVALE
740 North Mary Ave.
Sunnyvale, CA 94086

CHICAGO
15020 Lagrange Rd.
Orland Park, IL 60462

SACRAMENTO
11225 Trade Center Dr.
Suite #100
Sacramento, CA
95742

DENVER
7600 Cherry Creek
South Drive, #409
Denver, CO 80231

MARIN COUNTY
650 Sir Francis Drake Blvd.
San Anselmo, CA
94960

ATLANTA
6060 McDonough Dr.
Norcross, GA 30093

BOSTON
808 Cambridge St.
Burlington, MA 01803

NOVELL
Authorized Partner
PartnerNet™

18M

keep an eye on the best internet value in California...

Looking for a crazy low price, but you say you want "experience from the big guys?" And of course, there's long term reliability. Not to mention 24 hours a day, 7 days a week toll-free technical support, and toll-free local dial-up. "Is that asking too much?" At JPSnet "you can count on us for all this and more!" So why pay more than you have to? JPSnet, one of California's established Internet service providers has been providing continuous Internet access for three years. JPSnet is fully equipped for high speed Internet access with the largest and most advanced resources. We can give you exactly what you're looking for...*And yes! At the right price.*

Get More Data Faster

K56 FLEX

CONNECT with Rockwell

$99/yr.

ASCEND

MERLOT PERSONAL $99/yr.

- Unlimited Internet Access
- FREE... 3 E-mail Addresses
- FREE... 20 MEGS of Web Space
- FREE... Software
- TOLL-FREE... 24 hr./7 days a wk. Tech Support
- K56 Flex Dial Up Access
- 10-Day Money-Back Guarantee

COGNAC ISDN $99/yr.

- Unlimited Internet Access
- FREE... 3 E-mail Addresses
- FREE... 20 MEGS of Web Space
- FREE... Software
- TOLL-FREE... 24 hr./7 days a wk. Tech Support
- 10-Day Money-Back Guarantee

www.jps.net
sales@jps.net

CHAMPAGNE BUSINESS $299/yr.

- Virtual Domain Hosting, ie. "yourcompany.com"
- Unlimited Internet Access
- Unlimited FTP and Access to Your Web Space
- FREE... 20 E-mail Addresses
- FREE... 50 MEGS of Web Space
- FREE... Software
- TOLL-FREE... 24 hr./7 days a wk. Tech Support
- K56 Flex Dial Up Access
- ISDN Dial Up Access Available
- Site Statistics & Secured Servers Available
- Frame Relay Available

WEB DESIGN SERVICES

- Web Page... Starting at $99

JPSnet INTERNET SERVICES

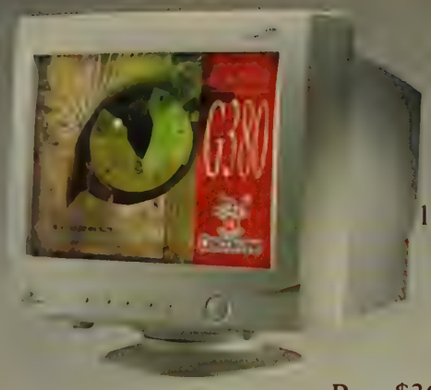
- One time setup fee of $25.

770 L Street, Suite 960, Sacramento, CA 95814

call 800-711-5353

Decaview, The Ultimate Price & Performance Leader Presents:

Decaview monitors have the same or better quality than the other popular brands..
SO, WHY PAY MORE!!!



G380 17"

COLOR MONITOR
.28mm Dot Pitch
16" Diagonal Viewable Area
Super High Contrast CRT
Max. Resolution:
1280x1024
1024x768@85Hz

Reg. $369 ($100.00 Instant Rebate)

NOW ONLY: $269.00
(Price Good Until 5/30/98)

G400 19"

COLOR MONITOR
.26mm Dot Pitch
18" Diagonal Viewable Area
Super High Contrast CRT
Max. Resolution:
1600x1200@75Hz
1280x1024@85Hz

Reg. 649 ($150.00 Instant Rebate)

NOW ONLY: $499.00
(Price Good Until 5/30/98)

Ask for your Decaview monitor at your nearest computer store TODAY!!!!!

Distributed By:
Bay Area Micro
408-260-8796
1158 Saratoga Ave.,
San Jose, CA 95129

Micro Concept
510-781-0429
2223 Commerce Place,
Hayward, CA 94545

For resellers who want to carry Decaview monitors, please call:
1-888-3322-808

Acorn Computer, Inc. Tel: 650-570-727261
W. 41st Ave., San Mateo, CA 94403

IQ Infoquest, Tel: 650-917-9180
4500 El Camino Real, Los Altos, CA 94022

LJ Systems Corp. Tel: 888-455-7978
26203 Production Ave., Hayward, CA 95131

CHICOTEC, Tel: 408-954-8998
542 W. Tremble Road, San Jose, CA 95131

Tuniss Computer, Tel: 650-401-6138
1124 Broadway, Burlingame, CA 94010

Songtech, Tel: 510-770-9051
46560 Fremont Blvd. #109, Fremont, CA 94538

Micro Concept, Tel: 510-781-0429
2223 Commerce Place, Hayward, CA 94545

Decaview®

Decaview
Professional Color Monitor
Tel: 510-429-8885

www.decaview.com
toll Free Decaview Tech Support
1-887-332-2832 (DECATEC)

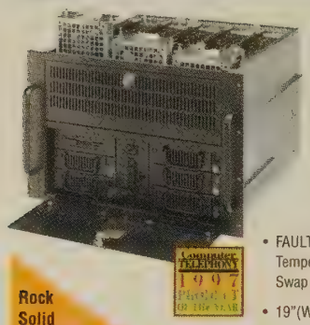
IN-HOUSE DESIGN • MANUFACTURING • CUSTOM MODIFICATION • TURNKEY SOLUTION

Quality. **Working for you Around the Clock**

Rackmount Computers

APPR

7000HT CTI/Network Applications

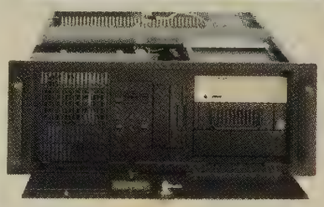


- 8 to 20 Slots PCI/ISA Backplane Support
- Split Backplane Support (Up to 6 Systems)
- AT or ATX Motherboard Support
- Individual Shock Mounts for 8 Drives
- FAULT Tolerant Features include: Temperature Monitoring, Hot Swap Fans, Power Supplies & HDD
- 19"(W) x 12.25"(H) x 18.5"(D)

Computer TELEPHONY 1997 Product of the Year

Rock Solid Fault Tolerant Protection

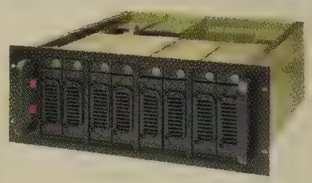
COMPACT - 4200



Fault Resilient System

- 8 to 14 slots BP, AT, ATX Motherboard Support 5 drive bays
- Hot Swap PS (300, 400W AC, 300W DC, 230W ATX) or Single PS
- Fan fail & over-temp alarm-visual & audible (optional)
- 82CFM cooling fans, optional dual 56CFM cooling fans
- Chassis only available
- 19"(W) x 7"(H) x 20"(D)

4080H RAID Subsystem



- Eight 5.25" Drive Bays
- Dual Hot Swap PS-400W(AC) or 300W(DC)
- Hot Swap Removable Drives Option
- RAID Level 0, 1, 3 & 5 Support
- 19"(W) x 7"(H) x 20"(D)

RAID

SBC - Pentium® II

NEW

- **CPU:** Pentium® II 233-300MHz
- **Cache:** 512K Level II Cache built in CPU
- **Memory:** 8 to 256MB, FPM, EDO, BEDO & ECC SIMM
- **Chipset:** Intel® 440FX
- **BIOS:** Award plug and play
- **On Board I/O:** PCI Bus Master (E)IDE, FDD, 16550 UART Serial, EPP/ECP parallel, USB, PS2 mouse and keyboard
- **Video:** ATI Mach 64 PII video w/ 2MB

5 WARRANTY

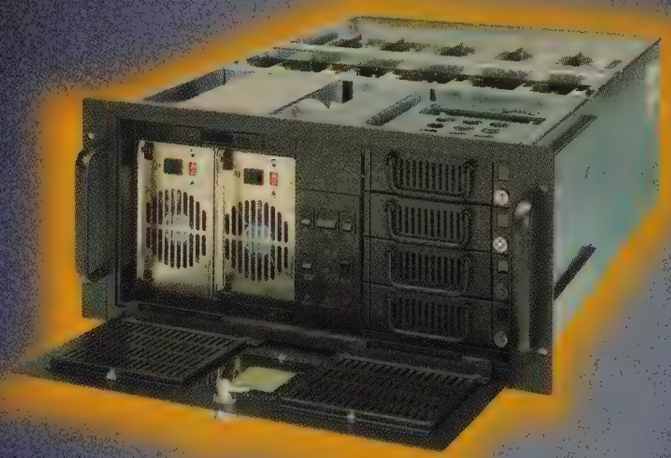
SBC - Pentium® MMX

MMX

- **CPU:** Intel, AMD or Cyrix CPU with MMX Technology Up to 233MHz for P55C Pentium Processor
- **Cache:** 512K Pipe Line Burst Cache
- **Memory:** Up to 384MB- FPM, EDO or ECC memory
- **BIOS:** AWARD Plug & Play BIOS
- **Chipset:** Intel 430HX Chipset
- **On Board I/O:** PCI Bus Master (E)IDE, FDD,16550 UART Serial, EPP/ECP Parallel, USB,PS2 Mouse & Keyboard
- **OS Compatibility:** Windows NT/95/3.1.x, OS/2 Warp SCO UNIX, Netware & DOS

5 WARRANTY

Fault Tolerant CT/Network Server



Intelligent Fault Tolerant Computer Telephony / Network Server

5200

Computer TELEPHONY 1997 Product of the Year

Made In U.S.A

- Individual Shock Mounts for up to Eight 5.25" Devices
- Air Filters on All Intake Vents
- Front Panel Support for 4 Individual Systems
- Front Panel Mounted Activity & Alarm LED's
- Steel and Aluminum Construction
- 19"(W) x 8.75"(H) x 26"(D)

- **Over Temp & Fan RPM Monitor**
- Hot Swap Fans & Power Supplies
- Hot Swap Removable Drive (optional)
- 8-20 Slots PCI/ISA Backplane Support
- Split Backplane (Up to 6 Systems) Support
- AT or ATX Motherboard Support

Full Line of Rackmount Products

Rackmount Keyboards • Monitors • Expandable Rack Cabinets

ISO 9001 FC 443812-001 UL ISO 9001 APPRO International, Inc CE

APPR

PROMO#: AMT1010

APPRO International, Inc.

800 927 5464

TEL (408) 941-8100 FAX (408) 941-8111

446 South Abbott Ave., Milpitas, CA 95035

VISA

NAB98

April 6-9
Las Vegas
Nevada
Booth # S11545

Catalog on Line
http://www.appro.com
info@appro.com

S T A T E - O F - T H E - A R T W E B H O S T I N G

Activate $19.95 Now!

HostPro defines a new era in web hosting–speedy, reliable service and a wealth of features starting at $19.95 per month.

STANDARD FEATURES (all packages!)

- Your own domain name *(www.yourdomain.com)*
- Free domain name registration
- Both Unix and NT hosting
- 30 day money-back guarantee
- Full Microsoft® FrontPage 98® support
- Default e-mailing capability
- Web control panel for site administration
- Unlimited autoresponders
- Unlimited FTP (24 hours per day)
- Full custom CGI execution capability
- Java™, Javascript, Perl, C, S++, CTT, & Python
- Access to our vast CGI script library
- Excite® search engine
- Controllable anonymous FTP
- Daily detailed hit analysis
- Access to raw log files
- Daily complete tape backup
- Full-time uninterruptable battery backup
- Shockwave, Quicktime, Flash, Vivo & Emblaze
- Assistance w/script installation

MONEY BACK GUARANTEE 30 day

EASY SWITCH ESP PROGRAM

Free set-up on site transfers
Hassle free with our assistance

HostPro offers a variety of packages to give your site maximum impact for minimal expense. Contact HostPro about our more advanced features commerce solutions and flexible add-ons.

- ***15% Discount given on 12 month contracts***
- ***Resellers ► Ask about our NET PLANET Virtual ISP™ program***

NET VALUE $19.95

Includes standard features plus the following for just $19.95

- 60 MB of web space
- 2,000 MB of traffic/month
- 12 e-mail accounts

NET NT $29.95

Includes standard features plus the following for just $29.95

- 60 MB of web space, 2000 MB traffic/month, 12 e-mails
- ASP, ActiveX™, and VB script
- Microsoft® Access and FoxPro database support
- Microsoft® Active Server Pages
- Microsoft® Visual InterDev and Office 97 support
- Complete stat reports using WebTrends

NET PLUS $39.95

Includes standard features plus the following for just $39.95

- 100 MB of web space, 3,000 MB traffic/month, 20 e-mail
- Advanced ShopPlus Cart (a $500 value!)
- Shared secure socket layer (SSL)
- CyberCash™ live payment authorization and capture system
- RealAudio® and RealVideo®
- mSQL and mySQL databases, Cron, PHP 3.0

NET PRO $49.95

Includes standard features plus the following for just $49.95

- 100 MB of web space, 3000 MB traffic/month, 20 e-mails
- Advanced ShopPlus Cart (a $500 value!)
- Shared secure socket layer (SSL)
- CyberCash™ live payment authorization and capture system
- Cold Fusion 3.1
- Microsoft® Access and FoxPro database support
- Microsoft® Active Server Pages
- Microsoft® Visual InterDev and Office 97 support
- Microsoft® NetShow
- RealAudio® and RealVideo®
- Complete stat reports using WebTrends

Certified FrontPage™ Web Presence Provider

Around-the-Clock Tech Support

Deciding on a web host is a pretty big deal. You owe it to yourself to contact HostPro at:

1.888.638.5831

www.hostpro.net • sales@hostpro.net

HostPro
A division of NetLimited LLC

Extreme

PERFORMANCE SERIES

- 100MHz P2 Bus
- UltraWide SCSI
- Lots of Memory
- Top Graphics Board

350MHz(512K) $2,699

400MHz(512K) $2,899

450MHz(512K) N/A

Extreme Performance Upgrade Options

HARD DRIVES
- 9.1GB UW-SCSI [+$325]
- 4.5GB 10K rpm UW [+$150]
- 9.1GB 10K rpm UW [+$475]
- U2W [many options]

AGP VIDEO CARDS
- ATI XPERT@WORK 4MB [+$0]
- ATI AIW PRO 4MB [+$125]
- Matrox Productiva 8MB [+$0]
- Diamond Viper V330 4MB [+$25]
- FireGL 1000 Pro 8MB [+$75]
- Monster 3D 2 8MB [+$215]
- Leadtek 2300 8MB [+$75]
- Leadtek 2500 (PCI) [+$600]
- Leadtek 2530 [+$1500]

CD-ROM/CDR/CDRW (SCSI)
- Yamaha 4x2x6 CDRW [+$460]
- Panasonic 4x8 CDR [+$335]
- Plextor 4x8 CDR [+$460]
- Plextor 32X UltraPlex [+$100]

BACKUP DRIVES (SCSI)
- IOMEGA ZIP [+$100]
- IOMEGA JAZ 1GB [+$270]

SPEAKERS
- ACS45 w/subwoofer [+$35]
- ACS48 w/subwoofer [+$90]
- ACS500 w/surround [+$190]
- Soundworks w/subwoofer [+$45]
- Microworks w/subwoofer [+$150]

VOICE-FAX/MODEM
- USRobotics 56K X2/V.90 [+$40]

NETWORK CARDS
- Intel EtherPro 10/100B-T [+$55]
- 3COM 3C905 PCI 10/100B-T [+$65]

MOTHERBOARDS/CPUS
- Dual CPU Support [+$100]
- 2nd CPU 350/400MHz [+$600/$800]

MEMORY
- 256MB 100MHz [+$190]

OFFICE SUITES/BUNDLES
- MS Office 97 Pro (CD/Manual) [+$150]

SOUND CARDS
- Soundblaster AWE 64 GOLD [+$50]

MONITORS
- SEE NEXT PAGE

Extreme Base Configuration

- ASUS P2B98 BX chipset Motherboard
- Adaptec UltraWide SCSI Controller
- Intel Pentium-II 350/400/450MHz CPU
- 128MB SDRAM, 100MHz w/SPD
- 4.5GB Quantum UW-SCSI Hard Drive
- Intel i740 8MB 2X AGP Video Card
- Toshiba 32X SCSI CD-ROM Drive
- Diamond Supra 56K V.90 VoiceFaxModem
- Teac 1.44MB Floppy
- Creative Labs SoundBlaster PCI 64
- 19" (18"v) ADI MicroScan 6P Monitor (.26dp, 1600x1200@75Hz)
- Altec Lansing ACS43 Speaker System
- Logitech ScrollMouse PS/2
- Focus FK2001 Keyboard PS/2
- Microsoft Windows 95 **or** NT 4.0
- In-Win A500 ATX MidTower Case

VIDEO CARDS

Your choice of video card really depends on what you use the machine for the most, and whether or not you plan on adding an extra 3D accelerator. Aside from games and 3D design/animation, not many programs take advantage of the 3D features found in the new video cards. **However**, even if you need good 3D performance only 20% of the time we do recommend a card that focuses on 3D more than 2D. Bad 3D performance is much more noticeable and annoying than mediocre 2D performance. If you plan on adding a Voodoo 2 card for 3D gaming, choose a card like the Matrox Productiva G100 as your 2D graphics card. If you are using the system as a graphics workstation, we highly recommend the Leadtek video cards with 100% hardware OpenGL. We carry the 2300AGP, 2500PCI and the new 2530AGP. For hobby video capture and editing we recommend the ATI All-In-Wonder Pro, which is also a very capable 2D/3D card. All the ATI 3D Rage Pro cards can do DVD decoding as well. With the new drivers, the Diamond Viper V330 is excellent for both 2D and 3D. Highly recommended! For low-end OpenGL acceleration the Diamond FireGL 1000 Pro is pretty much equivalent to the Leadtek.

MOTHERBOARDS

100MHz Bus makes a BIG difference! If you are serious about getting a top performing machine, don't even think about the old LX(66MHz) chipset! NOTE: Only the 350MHz and higher CPUs will have 100MHz Bus! 333MHz and below will run well on the BX boards, but the bus speed is then 66MHz. The motherboard is the single most important part in your system, so choose it wisely; If you make a living using the system, or it will be a server, go for ASUS. Our defective return rate is virtually zero, and we have no intermittent failures. We are so far very happy with the ABIT BX6 board, and this is the choice for all you overclocking freaks. If you are willing to play with the settings and sacrifice some reliability for that extra performance edge, go ABIT! We are a little bit concerned about the Supermicro reliability because of past experience with the P6SLS in particular, but at this point we have had no problems with their new BX boards. This is how we rate the boards after a few weeks of testing (5/1/98):

	COMPATIBILITY	RELIABILITY	PERFORMANCE	FEATURES
ABIT	A-	A-	A+	A+
ASUS	A+	A+	A	A
SUPERMICRO	A-	A-	A	A

WHY YOU SHOULD BUY FROM LJ SYSTEMS CORP.: **#1**

WARRANTY & SUPPORT
- **3 Years Warranty**
- **Toll-free Tech Support**
- **Experienced staff**

Call Toll-Free: 1.888.455.7978

(888) 4-LJSYSTEMS

Website http://www.ljsystems.com

LJ SYSTEMS CORP.
26203 Production Ave. #7, Hayward, CA 94545
(888) 455-7978 • (510) 785-4355 • fax (510) 785-4462

Terms & Conditions (complete details available upon request, and on our website):
3 Years warranty on systems • Warranty covers product defects, not negligence/physical damage • Shipping, handling and insurance are extra and non-refundable • Opened software is non-returnable (except pre-installed OS) • Absolutely no refunds after 30 days • Return merchandise must carry valid RMA#, be complete, undamaged and shipped prepaid/insured • Prices, specs and availability subject to change without notice • Not responsible for

LJ SYSTEMS CORP. • (888) 455-7978 • (510) 785-4355 • fax (510) 785-4462

Affordable

PERFORMANCE SERIES

- Intel BX Chipset
- Ultra-DMA/33
- 17" Monitor
- Top Graphics Board

66MHz BUS CPU	
266MHz(Celeron)	$1,369
233MHz(512K)	$1,399
266MHz(512K)	$1,449
300MHz(512K)	$1,549
333MHz(512K)	$1,649
100MHz BUS CPU	
350MHz(512K)	$1,799
400MHz(512K)	$1,999
450MHz(512K)	N/A

Affordable Base Configuration

- ASUS P2B98 BX chipset Motherboard
- Intel Pentium-II 233-450MHz CPU
- (NOTE: 66MHz Bus for 233-333MHz)
- 64MB SDRAM, 100MHz w/SPD
- 4.3GB Quantum Ultra-DMA/33 Drive
- Intel i740 8MB 2X AGP Video Card
- Toshiba 32X IDE CD-ROM Drive
- Diamond Supra 56K V.90 VoiceFaxModem
- Teac 1.44MB Floppy
- Creative Labs Ensoniq AudioPCI
- 17" (16"v) Decaview G380 Monitor (.28dp, 1024x768@85Hz)
- Altec Lansing ACS43 Speaker System
- Logitech ScrollMouse PS/2
- Focus FK2001 Keyboard PS/2
- Microsoft Windows 95
- In-Win A500 ATX MidTower Case

WHY YOU SHOULD BUY FROM LJ SYSTEMS CORP.: #3

PEACE OF MIND

- **30-Day Money Back Guarantee**
- **No Restocking Fees**
- **Highest Quality, Brand Name Parts**

No Surcharge

MONITORS

We carry all the models from the following manufacturers: ADI, CORNERSTONE, DECAVIEW, EIZO-NANAO, HITACHI, NEC, NOKIA, OPTIQUEST, SONY and VIEWSONIC. Below we have listed the monitors that we like because of picture quality and/or value:

17"

Decaview G380 $269
(.28dp, 1024x768@85Hz, Value)

Decaview GA387 $389
(.25dp, Trinitron, 1600x1200@75Hz, Excellent picture!)

19"

ADI MicroScan 6P $569
(.26dp, 1600x1200@75Hz, Value/Picture)

Hitachi Superscan Elite CM751 $799
(.22dp,1600x1200@75Hz, Excellent picture!)

21"

Decaview PA630 $799
(.28dp, Trinitron, 1600x1200@85Hz, Excellent value!)

Viewsonic P815 $1249
(.25dp, 1800x1440@76Hz, Excellent picture!)

Sony 500PS $1399
(.26dp, Trinitron, 1600x1200@85Hz, Excellent picture!)

MODEMS

The new Diamond SupraMax PCI V.90/k56flex modem is standard in all our systems. We prefer the PCI modems because they put less load on the CPU than ISA peripherals. PCI modems may not be compatible with Windows NT. We also carry the SupraExpress 56 ISA (Voice and SP models), as well as the full line of USRobotics. External modems are available. All our modems are either V.90 or software upgradable.

THE SCSI ADVANTAGE

The SCSI controller takes the load off the CPU, resulting in better overall system performance. SCSI hard drives also have other features, such as command queuing, that really speeds up multitasking/any disk intensive tasks where many processes issue read/write requests at the same time. The ability to perform disk operations out-of-order makes a big difference. For reliable, continuous audio/video recording with CDR/CDRW, SCSI is a must.

HARD DRIVES

All of our IDE hard drives are Ultra-DMA/33. We generally use Quantum Fireball drives (5,400rpm) because of reliability, but the speed of the new 7,200rpm Seagate is better, and you may upgrade to those models. We also carry Western Digital and Maxtor. For SCSI we carry the UltraWide Quantum, Western Digital and IBM in 7,200rpm, and the Seagate, Fujitsu and IBM in 10,000rpm. Call for availability on Ultra-2-Wide drives.

WHY YOU SHOULD BUY FROM LJ SYSTEMS CORP.: #2

CUSTOM CONFIGURATIONS

- **On-line Configurator**
- **Free fax/phone Quotes**
- **Excellent Parts Selection**

Affordable Performance Upgrade Options

HARD DRIVES (Ultra-DMA/33)
- 6.4GB [+$45]
- 8.4GB [+$130]
- 11.5GB [+$235]

AGP VIDEO CARDS
- ATI XPERT@WORK 4MB [+$0]
- ATI AIW PRO 4MB [+$125]
- Matrox Productiva 8MB [+$0]
- Diamond Viper V330 4MB [+$25]
- FireGL 1000 Pro 8MB [+$75]
- Monster 3D 2 8MB [+$215]

CDR/CDRW (IDE)
- Yamaha 4x2x6 CDRW [+$460]
- Sony/Mitsumi 2x8 CDR [+$280]

BACKUP DRIVES (IDE)
- IOMEGA ZIP [+$100]

SPEAKERS
- ACS45 w/subwoofer [+$35]
- ACS48 w/subwoofer [+$90]
- ACS500 w/surround [+$190]
- Soundworks w/subwoofer [+$45]
- Microworks w/subwoofer [+$150]

VOICE-FAX/MODEM
- USRobotics 56K X2/V.90 [+$40]

NETWORK CARDS
- Intel EtherPro 10/100B-T [+$55]
- 3COM 3C905 PCI 10/100B-T [+$65]

MEMORY
- 128MB 100MHz SDRAM [+$190]

OFFICE SUITES/BUNDLES
- MS Office 97 Pro (CD/Manual) [+$150]

SOUND CARDS
- Soundblaster AWE 64 [+$25]
- Soundblaster PCI 64 [+$50]
- Soundblaster AWE 64 GOLD [+$100]

MEMORY

We carry 10, 9 and 6ns SDRAM DIMM w/SPD (Serial Presence Detect for BIOS configuration), and we make sure that the memory runs on your system. If you plan on overclocking your system, you should go for the 6ns/PC100 memory. How much memory you should get? As much as you can afford! 64MB is minimum, 128MB is nice, and 256MB is recommended for serious graphics work (3D Rendering/Adobe Photoshop/etc.).

CUSTOM CONFIGURE YOUR SYSTEM ON-LINE!
HTTP://WWW.LJSYSTEMS.COM

Complete Web-Database Solutions

Automate your customer and employee communications:

- Catalogs
- Job Applications
- Questionnaires, Surveys
- Automated Sales Inquiry Systems

ElectriCiti provides:

- Web-Database Hosting
- Easily Customizable Pre-built Applications (complete GUI interface builder)
- Developer Tools (access to source code)
- Expert Technical Assistance
- Custom Application Development

"Instant-On" Applications: Just log in and turn it on!

- No server to configure
- No software to install
- No scalability problems
- No administration headaches!

We call it

ZAP!™

Instant Web-Database Applications

Powerful Web-Database Applications without programming.

Industrial-strength Oracle database and Apache Web servers.

Fast Sun Sparcstations (SunOS and Solaris).

Full Administrative and programmer access.

SQL, CGI, Perl and C development tools.

SSL, SSH and OPIE secure access from any network.

Custom CGI, Perl, Java and C development available.

For free consultation call: 619-338-9000

ElectriCiti™
Web Database Solutions

STOP BUSINESS & HOME SOLUTIONS SINCE 1991 MICROSONIC OFFERS THE BEST SERVICE IN THE BAY AREA! STOP

SONIC STUDENT

Mini-Tower Case
1.44 Floppy Drive
Intel Triton 430TX
512K Motherboard
Intel P-100 CPU/Fan
16MB RAM
2.1GB Hard Drive
S3 Virge 2MB Video
Keyboard
Mouse

P-133 $495
P-166 MMX $515
P-200 MMX $525
P-233 MMX $600

$485

SONIC STUDENT MULTIMEDIA

Mini-Tower Case
1.44 Floppy Drive
Intel Triton 430TX
512K Motherboard
Intel P-100 CPU/Fan
16MB RAM
2.1GB Hard Drive
S3 Virge 2MB Video
Keyboard
Mouse
24X CD-ROM
Soundcard
15" Monitor

P-133 $550
P-166 MMX $570
P-200 MMX $580
P-233 MMX $655

$540

SONIC FAMILY

Midi-Tower Case
Intel Triton 430TX
512K Motherboard
Intel P-166 MMX CPU/Fan
32MB RAM
3.1GB Ultra DMA Hard Drive
S3 Virge 4MB Video Card
1.44 Floppy Drive
Keytronics Keyboard
Logitech Mouse
15" Monitor

P-200 MMX $555
P-233 MMX $650

$545

SONIC FAMILY MULTIMEDIA

Midi-Tower Case
Intel Triton 430TX
512K Motherboard
Intel P-166 MMX CPU/Fan
32MB RAM
3.1GB Ultra DMA Hard Drive
S3 Virge 4MB Video Card
1.44 Floppy Drive
24X CD-ROM
SB Sound Card
Keytronics Keyboard
Logitech Mouse
15" Monitor

P-200 MMX $635
P-233 MMX $710

$625

SONIC ASUS MULTIMEDIA

Medium Tower Case
1.44 Floppy Drive
ASUS 430TX Motherboard
Intel P-166 MMX CPU/Fan
32MB RAM
4GB Ultra DMA Hard Drive
SVGA 4MB S3 Virge Card
Keytronics Keyboard
24X CD-ROM
AWE Sound Card
MS Mouse/Pad
15" Monitor

P-200 MMX $779
P-233 MMX $805

$769

SONIC P-II

Medium ATX Case
ASUS P2 L97 Motherboard
Intel P-II 233MHz CPU/Fan
32MB RAM
4GB Ultra DMA Hard Drive
Matrox Millennium II 4MB Card
US Robotics 56K Fax/Modem
24X CD-ROM
SB AWE 64
Keytronics Keyboard
MS Mouse/Pad
17" Monitor

P-II 266MHz $1240
P-II 300MHz $1360
P-II 333MHz $1490

$1195

SONIC POWER USER

Medium ATX Case
1.44 Floppy Drive
Intel 440BX Motherboard
Intel P-II 350MHz CPU/Fan
64MB RAM
4GB Ultra DMA Hard Drive
Diamond Fire CL 1000 PCI 4MB
V.90 Fax/Modem
32X CD-ROM
Soundblaster AWE 64
Keytronics Keyboard
MS Mouse
17" Monitor .28dpi

P-II 400MHz $2040

$1725

SONIC GRAPHIC STATION

Medium ATX Case
1.44 Floppy Drive
Intel 440 BX Motherboard
Intel P-II 350MHz CPU/Fan
256MB RAM
6.0GB Ultra DMA Hard Drive
Matrox Millennium II 8MB Card
V.90 Fax/Modem
MS Ergonomic Keyboard
32X CD-ROM
SB AWE 64
MS Mouse
17" Monitor .28dpi

P-II 400MHz

$2050

MICROSONIC SPECIALS OF THE MONTH

MS-COMPATIBLE MOUSE $2

1-4 ENHANCED KEYBOARD $6

15" MONITOR .28DPI $134

MID-TOWER CASE $20

LIMIT ONE PER CUSTOMER

NOTEBOOKS
IBM • Fujitsu • Toshiba • Compaq • Digital • Rix

UPGRADES & ACCESSORIES

MOTHERBOARDS
Intel Atlanta 440LX Board $196
Pentium® II Portland/Sound 512K/233-266MHz 215
Intel Triton III 75-233MHz MMX/AMD/Cyrix 69
Tyan Tahoe ATX P-II Intel 430TX Chipset 139
ASUS Pentium® P55T2P4S AT/512K 149
ASUS Pentium® TX97E ATX/512K 159
ASUS Pentium® TX97-XE ATX/512K 169
CALL FOR LATEST MEMORY PRICES

GRAPHICS CARDS
ATI Turbo 4/8MB PCI SDRAM $129/169
Diamond Stealth 64 3D 2/4MB EDO 48/72
Matrox Millennium II 4MB WRAM 185
Matrox Millennium II 8MB (Retail) 259
Matrox Mystique 220 2/4MB 99/119
SVGA 1MB To 2MB PCI 25

SOUND CARDS
Yamaha Sound Card $19
ESS 3D 16-Bit IDE 19
SoundBlaster 16-Bit PnP 48
Creative Labs AWE 64 89

CD-ROMS
CD Writer 2x6 IDE $349
16X SCSI NEC 129
8X IDE Mitsumi 50
16X IDE 59
24X IDE Panasonic 69
60W Speakers 12
240W Speakers 32

HARD DRIVES
1.2/1.7GB IDE $118/126
2.6/3.5GB IDE 168/194
4.0/6.4GB IDE 238/349
2.1/4.3GB Ultra Wide SCSI 229/320
9.1GB Ultra Wide SCSI 889

MONITORS
ZYNC
14" SVGA 1024x768 .28dp $150
15" SVGA 1280x1024 .28dp 199
17" SVGA 1280x1024 .28dp 389
SPECIAL INTERNAL PC VENTILATOR
Stops Over Heating ..... Only $19

SAMSUNG VIEWSONIC
WE BEAT EVERYONE'S PRICE ON ALL MODELS
SONY-NEC ..... Call
OptiQuest 20" 1600x1280 .28 699
OTHER MONITORS AVAILABLE ..... CALL

NETWORKING
NE2000 PnP Novell Certify
32-Bit PCI/16-Bit ISA $19/15
Intel Express Pro PCI 10/100BT 55
3Com 509TP ISA 49
3Com 905TX PCI 68
Ethernet 5-Port Hub 10BT 45
Ethernet 8-Port Hub 10BT 59
8/16-Port Hub 60/80

CASES
Mini Tower w/250W PS $24
Mid Tower w/250W PS 37
Full Tower w/250W PS 55
Mid Tower ATX w/250W PS 70

FAX MODEMS
USRobotics 33.6 Int $69
Supra Express 56.6 Voice Int 99
USRobotics 56K Internal 152
PCMCIA 33.6 Fax Modem 99

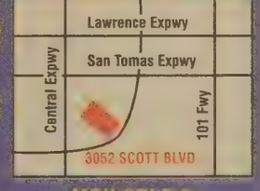
SOFTWARE
MS Windows 95 CD Full w/System $89
MS Office Pro 97 CD w/System ..... CALL
MS NT Server/W.W. 4.0 or 5.0 ..... CALL

Micro SONIC COMPUTER

408•727•4362

408•727•5528 (FAX)

CORPORATE P.O. WELCOME



MON-FRI 9-6
3052 SCOTT BLVD.
SANTA CLARA

Just When You Thought It Was Safe

Another Mess Three Months After The Y2K Crisis Hits

By Paul Hoffman

Software that calculated ten-year loans started coming up with crazy results about eight years ago. That software has long since been fixed. However, lots of software won't fail until the current date is in the next century.

By now, you have probably heard about the impending problem due to occur on or around January 1, 2000. Software that assumes that all dates are in the 20th century will fail, possibly disastrously, when the current date moves into the 21st century. The popular press is starting to cover this more and more, which is good, because many companies are still ignoring the problem.

In fact, the problem has already been manifesting itself for many years, but not to the extent that is expected a year-and-a-half from now. For example, software that calculated ten-year loans started coming up with crazy results about eight years ago. That software has long since been fixed. However, lots of software won't fail until the current date is in the next century.

Although less likely to cause catastrophe than the Year 2000 problem, which has been dubbed "Y2K" because everything needs a cute acronym, two more date-related bugs in some computer software have surfaced. Both have been known for many years, but were only talked about rarely. The first will hit on February 29, 2000, only a few months after the Y2K tsunami hits; the next won't be seen until 2038, and should be fixed well before then.

All three date-related problems stem from human error. It is somewhat amusing to read articles calling these "computer problems," when in fact they are all due to bad planning or lack of care on the part of the programmers who wrote the software with the problems. Computer hardware does not cause these date-related problems: It's the software that is written to run on the computers that does.

Because many programmers have avoided all three problems just fine, it is reasonable to say that only some programmers are responsible for the programs that will fail due to the date-related problems. Of course, it is also the responsibility of the people who bought the programs to check whether or not the programs worked. Given how much publicity that the Y2K problem has gotten, anyone who says, "Gee, I didn't know about that," is going to have a hard time convincing the rest of us of their ignorance.

2000 Is A Leap Year

The first of these problems, which I have named "Y2K2" since it happens in the second month of 2000, stems from the fact that many programmers didn't get the leap year rules exactly right when they wrote their programs. The basic issues is that 2000 is a leap year (that is, February 29 exists during 2000). The fact that this is an issue may come as a surprise to some people because they thought that every year divisible by 4 has a leap year, but that's not the case.

The rule for whether or not a year has a leap year is "every year divisible by 4, except for years divisible by 100; however, years divisible by 400 have a leap year." The first part is easy, and it's what we're all used to. The second and third parts are where some programmers get into trouble. 1800 and 1900 were not leap years; 2000 will be. If a programmer knew the first two rules but not the third, the resulting program will say that 2000 is not a leap year, when in fact it is.

I can hear some of you asking, "Why on earth are the rules so arcane?" There's actually a very good reason: Without them, the seasons would start earlier and earlier (or later and later), and the stars would move relative to where they are expected to be.

A solar year, the amount of time it takes for earth to get to the same point in its rotation around the sun, is 365.24219 days. If we had no leap years at all, we would lose about 1/4 day per year in our position around the sun; in 120 years, the position of the stars on May 1 would be where they were on April 1 today, and the average weather would have changed at the same rate. With a simple rule of "a leap year every 4 years," the change is less noticeable to

Notebook, Systems, & Networks with Great Prices & Service

Special Business Services

Networking • Administration • On-site Service • Software Installation • Repairs • Upgrades

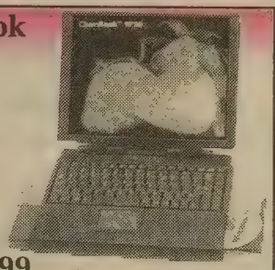
CHEMBOOK 3300 12.1"TFT NOTEBOOK

All-in-One Design

Intel 430TX Chipset, 256K Pipeline Cache
32MB EDO Memory Up to 96MB
2MB EDO Video with GUI Accelerator
Toshiba 2.1 GB Slim Harddrive Build-in
Build-in 20X CD-ROM, 1.44MB Floppy Drive
Two type II one type III PCMCIA slot
Build-in Stereo line-In/Out 3D Surround Sound
NiMH Battery, AC Adapter. Carrying Case

Pentium® 200MHz MMX $1388
Pentium® 233MHz MMX $1418

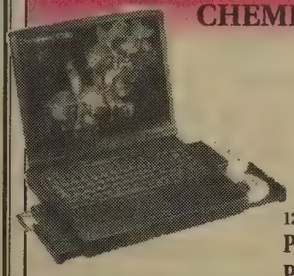
CHICONY 9750 13.3" TFT Notebook



XGA LCD up to 1024x768 x 64K
Intel Pentium® CPU w/512K, i430TX Chipset
32MB EDO Memory up to 80MB
2MB EDO Video with GUI Accelerator
Toshiba 2.1GB Slim Harddrive Removable
Removable 20X CD-ROM, 1.44MB Floppy Drive
PCMCIA Type III Slot support Card Bus
Support Cardbus / Zoomed Video Port
Li-Ion Battery, AC Adapter. Carrying Case

Pentium® 200MHz MMX $1599
Pentium® 233MHz MMX $1629

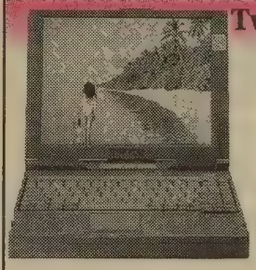
CHEMBOOK 9780 14.1" XGA Multimedia



(Tillamook / IMM Ready) (Zip Drive Ready)
32MB SDRAM Memory / 4MB EDO Video Ram
20 x CD-ROM Drive, Removable
2.1GB Toshiba Slim HD, 1.44MB FDD
64-Bit PCI VideoController with Graphics Accelerator
2 Smart Bays, Supports 2nd & 3rd Hard Drive
Two type II one type III, CardBus & Zoomed Video
16-Bit stereo/3D Sound System with Hardware WaveTable
Li-Ion Battery, AC Adapter. Carrying Case

12.1" TFT SCREEN AVAILABLE FOR ..... $400 LESS
Pentium® 200MHz MMX..... $2159
Pentium® 233MHz MMX..... $2199

TwinHead 8800 12.1 TFT NOTEBOOK



ALL-in-One, Build-in 56K Internal Faxmodem
32Mb EDO RAM / 256K L2 Cache
2.1GB Toshiba Slim HD, 1.44MB FDD
20X CD-ROM/Speaker/Microphone Port/TV Out
2MB Video PCI w/2MB VRAM 3D Acceleration
TV-Out connector with support for NTSC and PAL
16 bit full duplex stereo audio system built in
Two type II or one type III PCMCIA
Carrying case, AC Adapter, NIMH Battery,

Pentium® 200/233MHz MMX..... $1598/$1628

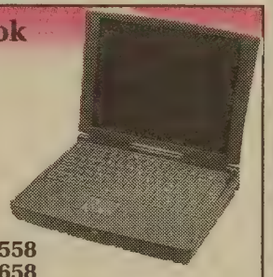
CHEMBOOK 7000 15.1" TFT Notebook

XGA LCD up to 1024 x 768 x 16.8M

32MB SDRAM Memory / 4MB EDO Video Ram
Intel 430TX Chipset, 512K Pipeline Cache
Toshiba 2.1 GB Slim Harddrive Removable
Build-in 20X CD-ROM, Removable 1.44MB Floppy Drive
Two type II one type III PCMCIA slot
32bit Cardbus / Zoomed Video Port
102 Full Size Keyboard, only 9.9 lbs
Li-Ion Battery, AC Adapter. Carrying Case

Pentium® 200MHz MMX $2570
Pentium® 233MHz MMX $2600

ASUS 6300 IMM 13.3" XGA Notebook



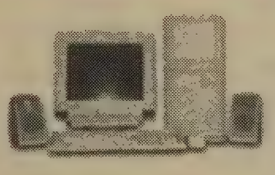
Upgrade-ready for future Pentium II processor
Intel 430TX Chipset, 512K Pipeline Cache
32MB SDRAM Memory up to 128MB
2MB EDO Video with GUI Accelerator
Toshiba 2.1 GB Slim Harddrive Removable
SmartBay 20X CD-ROM, 1.44 Floppy Drive Removable
Two type II one type III PCMCIA slot
32bit Cardbus /Zoomed Video Port
Auto tilt-up when open LCD panel
Li-Ion Battery, AC Adapter. Carring Case

Pentium® IMM Tillamook 233 ..... $2558
Pentium® IMM Tillamook 266 ..... $2658
Pentium® II 266 ..... $2958

Upgrade from 32MB to 64MB $120
Upgrade from 2.1GB to 3.0GB $88
Upgrade from 2.1GB to 4.0GB $260

PCMCIA 56K Fax Modem $95
PCMCIA Ethernet Card $70
for Extra 3300 NMHD Battery $70

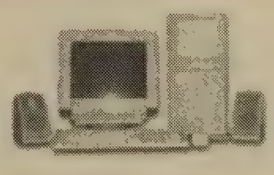
PENTIUM PCI MULTI-MEDIA SYSTEM



Pentium® Motherboard /512K Cache
32MB Memory EDO 60ns
2.1GB Fujitsu Hard Drive /1.44MB Floppy Disk
S3 3D w /2MB Memory Video Card
24X CD-ROM IDE ,Yamaha 3D Sound Card
56K Intermal Fax /Modem w /Voice X2 Technology
Mid Tower Case
PS/2 Mitsumi 104 Win95 Keyboard and Mouse
60W Speakers
DigitView 14" NI .28 1024 x 768 Monitor
Optional Video Teleconferenc Kit

Pentium® 200 MMX System..... $748
Pentium® 233 MMX System..... $788

PENTIUM II 233 / 266 / 300 SYSTEM



Pentium II Intel /Atlanta i440 LX Motherboard
64MB SDRAM Memory
4.3 GB Fujitsu Hard Drive /1.44MB Floppy Disk
Diamond Fire GL 1000 Pro AGP w/4MB
24X CD-ROM IDE, 3D Sound Card
56K Intermal Fax /Modem w/Voice X2 Technology
ATX Mid Tower Case w/250W
PS/2 Mitsumi 104Win95 Keyboard and Mouse
200W Speaker
Optional Video Teleconference Kit

Pentium® II 266 System..... $1148
Pentium® II 300 System..... $1275

ASUS DUAL SERVER
Pentium®- II 233/33
Starting at $2000

MDI technology inc.

(510) 668-0813

FAX: (510) 668-0713 www.MDI.com

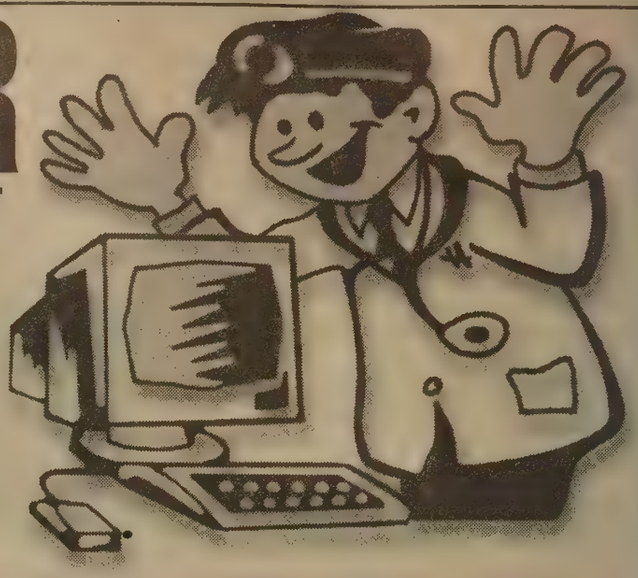
43004 Christy Street, Fremont, CA 94538

Office Hours: M-F: 9:30- 6:00, SAT. By Appointment • E-mail: FLIUMDI@AOL.COM

Terms & Conditions: Not responsible for type errors. One-Year Parts & 2-Year Labor Warranty on systems. All prices reflect 3% cash discount. Prices are subject to change w/o notice.

PC DOCTOR

THE CUSTOM COMPUTER SPECIALIST



COMPLETE PENTIUM® 233 w/ MMX with 15" MONITOR

Intel 233MMX with 512K, 32MB RAM, 2.1GB Fast IDE HD, 24X CD,
3D 2MB Video, 3D PnP Sound Card, 33.6 Fax/Modem, 1.44MB Floppy,
100W Speakers, Mini Tower Case, 104-Key Keyboard & 3-Button Mouse

Only $799

16MB RAM	686 166MMX 512K	500 Watt 3D	Sound Blaster 16 PnP
72-Pin EDO	MOTHERBOARD & CPU	3 Piece Sound System w/Sub-woofer	Sound Card
$25	**$125**	**$55**	**$35**

STUDENT PACKAGE

VX Pro II w/512K MMX Ready
PCI 64 Bit 1MB Video w/MPEG
1.44 Floppy Drive
2.1GB Ultra IDE Hard Drive
16X IDE CD-ROM
16MB SDRAM 10ns
3D PnP Sound Card
33.6 Fax Modem
100W Speakers
104 for Win 95 Keyboard
3-Button Serial Mouse
Mini-Tower Case 230 Watt

CYRIX 166MMX..... 530
AMD 166/166MMX..... 550/570
INTEL 166/166MMX..... 545/550
AMD 200MMX/233MMX..... 628/641
INTEL 200MMX/233MMX..... 662/692
PII 233/266..... 828/882

3D GAME MACHINE

Top Gun TX Pro 1024K MMX Ready
or Intel 440LX AGP for Pentium® II
3D 4MB 64 Bit PCI Video MPEG
1.44 Floppy Drive
3.1GB IDE Hard Drive
24X IDE CD-ROM
32MB SDRAM 10ns
3D PnP Sound Card
33.6 Fax Modem
3D 320W Speakers
104 for Win 95 Keyboard
Super Mini-Tower Case 230 Watt
Logitech 2-Button-Serial Mouse

SIMPLY THE BEST

TX Intel Triton 512K or Intel Triton
400LX for Pentium® II
ATI 3D RAGE 4MB SG RAM Video
1.44 Floppy Drive
4.3GB Ultra IDE Western Digital
32X Toshiba CD-ROM
32MB SRAM, 10ns
64-Bit Sound Blaster Sound Card
56.6 Voice Flex or X2 Fax/Modem
360W Speakers w/Surround Sound
104 for Win 95 Keyboard
Logitech 3-Button MouseMan
Medium Tower Case UL Certified

AMDK6 200MMX/233MMX... 831/844
INTEL 200MMX/233MMX.... 865/895
INTEL Pentium® II WITX M 233/266/300..... 1034/1088/1219

GRAFFIX STATION

Intel Triton 440LX AGP Motherboard
AGP ATI@Work 4MB SG RAM 3D Rage
1.44 Floppy Drive
6.4 Ultra DMA Western Digital
24X Toshiba CD-ROM
64MB SD RAM 10ns
16-Bit Sound Blaster PnP Sound Card
56.6 Voice Flex or X2 Fax/Modem
320W 3D Speakers
104 Windows 95 Keyboard
Logitech 3 Button Mouseman
Medium Tower Case 250W Power Supply

Pentium® II w/MMX 233/266/300/333..... $1163/1217/1384/1483

MONITORS w/3-YEAR WARRANY
14" SVGA NI ANALOG .28 DP 135
15" SVGA NI DIGITAL .28 DP 169
17" SVGA NI ANALOG .28 DP 325
17" SVGA NI DIGITAL .26 DP 365
20" SVGA NI DIGITAL .26 DP 840

CASES w/POWER SUPPLY
MINI TOWER/DELUXE UL CERT 24/28
SUPER MINI TOWER/DELUXE UL CERT . 28/34
MID TOWER/DELUXE UL CERT 45/47
MEDIUM ATX/DELUXE UL CERT ATX ... 55/66
FULL TOWER/DELUXE UL CERT..... 55/59
DESKTOP 29

MOTHERBOARDS
486 5x86 PCI VLB w/ IO 53
VIA 580VX 512K-MMX READY 57
VX Pro II 512 w/ 3D Sound 59
INTEL TRITON VX 512K 75-233 MMX READY.. 69
INTEL TRITON TX 512K-MMX READY..... 75
INTEL TRITON 440LX 233-333 Pentium® II .. 110
TOP GUN TXPRO 1024K 75-266 MMX READY.. 75
AT Style 440LX AGP MMX Ready 115
ASUS LX 97 PENTIUM® II ATX..... 145

SPEAKERS
4/100 WATT..... 5/13
120/320 WATT..... 15/25
360 w/ 3D SURROUND SOUND..... 35
500 Watt 3D 3 Piece Sound System w/ Sub-woofer 55

FAX/MODEMS
33.6 VOICE/33.6 SAVD..... 39/45
56.6 FLEX VOICE/56x2 VOICE..... 59
56.6 US ROBOTICS VOICE 115

MEMORY
30 PIN 1/4MB 4/13
72 PIN 4/8MB 12/16
SIMM 72 PIN 16/32MB 25/45
DIMM 168 PIN SDRAM 10 NS 16/32MB. 29/49

KEYBOARDS
MITSUMI 104 WIN 95 AT 12
MITSUMI 104 WIN 95 PS2 12
104 NATURAL w/ TOUCH PAD..... 55
105 Turbo Win 95 AT 10

CD-ROM
16X/24X IDE 49/53
24X/32X IDE Toshiba 69/80
Mitsumi CDR 2X-6X 290

MICE
3-BUTTON SERIAL/PS2 ..... 5/7
LOGITECH 2-BUTTON SERIAL..... 15
LOGITECH MOUSEMAN SERIAL /PS2.... 21/22
MITSUMI CORDLESS 40
SCROLLING MOUSE SERIAL..... 15

VIDEO CARDS
PCI 64 BIT 1/2MB 24/30
S3 VIRGE 3D 4MB EDO 64 BIT PCI 47
TRIDENT 3D TVOUT 2MB 64BIT PCI..... 38
TRIDENT 3D 2MB EDO 64 BIT PCI 33
AGP TRIDENT 3D 4MB SGRAM..... 55
ATI 3D RAGE II 4MB SGRAM PCI 75
AGP ATI 3D RAGE II 4MB SGRAM 135
1MB VIDEO UPGRADE 8

OTHER
COBRA DELUXE JOYSTICK 15
PRINTER CABLE..... 5
CD-AUDIO CORD 2
IOMEGA ZIP CARTRIDGE 12
MOUSE PAD..... 2
SECONDARY CASE FAN 5
PC MICROPHONE..... 8
IOMEGA ZIP CARTRIDGE 12
REMOVABLE HDD RACK..... 19

CPUs
INTEL MMX 166/200/233 ..... 110/119/149
INTEL PII MMX 233/266/300/333 ..... 225/279/410/545
CYRIX PR 166MMX 65
AMD K6 MMX 200/233 ..... 85/98

SOUND CARDS
FULL DUPLEX
S3 32 BIT PCI 3D WAVETABLE 45
SOUND BLASTER 16 PNP..... 35
SOUND BLASTER 64 AWE 64 75
OPTI 16-BIT PN SB COMP 13
YAMAHA 3D SOFTWAVE..... 17

FLOPPY DRIVES
1.44/1.2..... 19/5
IOMEGA ZIP 100MB INTERNAL..... 85

NETWORKING
ISA ETHERNET CARD 2/10BT COMBO..... 15
PCI ETHERNET CARD 2/10BT COMBO..... 19
3COM 3C-905-TX 10/100BT COMBO 65
5-PORT 10BT ETHERNET HUB 45
9-PORT 10BT ETHERNET HUB 55
ACER 16-PORT 10 BT HUB 135
10 BT NETWORK CABLE MISC LENGTH . CALL

SOFTWARE
MS WIN 95 CD OSR2 OEM..... 75
MS OFFICE 97 PROFFESIONAL 185
NORTON ANTIVIRUS OEM 30
WINDOWS NT 4.0..... 95
LOTUS SMART SUITE 95 (OEM)..... 30

PIPELINE CACHE
256/512K PIPELINE..... 6/15
ASSINK 256K (486) 13
CPU HEAT SINK & FAN 486/586..... 3/5

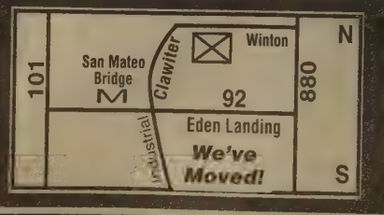
HARD DRIVES
IDE 2.1/2.5/4.3GB 129/138/175
FUJITSU UDMA 2.6/3.2/6.4GB... 145/149/225
WESTERN DIGITAL ULTRA DMA 2.5/3.2/4.3/6.4GB..... 135/149/179/235

BACKUP
COLORADO T3000 3.2GB W/TAPE..... 175
IOMEGA ZIP 100MB INTERNAL..... 85
IOMEGA ZIP 100MB EXTERNAL 149
External 800MB Seagate w/ Tape..... 80

(510) 264-9395 • FAX (510) 264-9396

22962 Clawiter #1, Hayward, CA 94545 • Hours: M-F 10-6 Sat 10-5

Terms: Advertised prices reflect 4% cash discount. All parts and systems are covered by manufacturers parts and labor warranty. Prices subject to change without notice and subject to stock availability. Not responsible for typographical errors. 30-day returns with 10% re-stocking fee.



regular people (11.2 minutes a year, or about 125 years to lose a day), but still quite noticeable to astronomers, satellite controllers, and so on.

Where Y2K2 Will Hit

People testing for the Y2K2 bug have found it in a number of places. Some BIOS software on some motherboards has been found to think the day after February 28, 2000, is March 1, 2000. Some operating systems have the same problem. Even in operating systems that understand that 2000 is a leap year, some important utilities within the operating system have the bug. It is very clear from reports of people testing for the Y2K2 bug that it is not nearly as widespread as the Y2K bug, and it is also much easier to find and fix.

It is somewhat amusing to read articles calling these "computer problems," when in fact they are all due to bad planning or lack of care on the part of the programmers who wrote the software with the problems.

However, people should not assume that the Y2K2 bug is harmless. A payroll program that issues checks on the day after February 28, 2000, will have written the checks a day too early. Worse yet, if it was calculating the numbers of days worked in February, it will have short-changed everyone by a day. This might be fixable later in the year by pretending that a later month had an extra day, but the problems associated with a post-hoc fix will be huge.

A worse scenario, and one that is becoming much more common, is a server that is up and running 24 hours a day, such as most Web servers, accounting mainframes, and so on. These servers cannot easily have their dates changed on them, since many of the programs they run depend on knowing the current date. They usually create new reports every day, and skipping a day or repeating a day can cause failures in later reports.

Fortunately, fixing the Y2K2 problem for most systems is relatively easy if it is done before February 29, 2000. Few of the systems with the Y2K2 bug need to know in advance that February 29, 2000, exists (although some definitely do). As long as the logic that says "2000 is not a leap year" is found before then, all the problems relating to knowing what today's date is will be avoided.

The systems where fixing this bug is harder are the ones which need to calculate the number of days between today and a date in the future. Fixing those programs is difficult because if you change the answer by a day, something else probably needs to change to compensate for the "extra" day gained.

And Forty Years From Now...

The next known major date problem lies about

Barcode Is Our Specialty
Software Solutions
Inventory Control
Asset Tracking
Quality Assurance Systems
Work-in-Process
Custom Solutions
Since 1985, Input Automation has been a single source for all your barcode needs: hardware, software, consulting and system design. Our philosophy is based on two principals: high quality industrial products, and the best technical and sales support available.
Barcode Equipment
Scanners, Terminals, Check-Readers, Etc.
Portable Data Collection
• FREE TRAINING !
• Local Technical Support
• Major Credit Cards Accepted
Terms Available OAC
• Dealers Welcome
(800) 641-8607
Input Automation, Inc.
http://www.inputautomation.com
fax: (310) 530-2849 or (415) 893-1856

www.csoutlet.com • www.csoutlet.com • www.csoutlet.com • www.csoutlet.com • www.csoutlet.com

COMPUTER SYSTEM OUTLET

PII 300 Multimedia ADI 19" Monitor .26DP 1600x1200.....$1799

ADI 21" Microscan 6G .28 1600x1200 Mac Compatible $899

ASUS 34X CD-ROM Now Available

NETWORK STATION
- Mini Tower Case w/ 250 watt PS
- ASUS SP97V M/B
- 1.2 UDMA Western Digital Hard Drive
- 16MB EDORAM
- 1MB Video
- 24X US Drive CD_ROM
- 3Com 10 Base-T Network Card
- 16Bit Sound Card
- Mitsumi 1.44 Floppy Drive
- Window 95 CD
- Win 95 Enhance Keyboard
- PS2 Mouse
- Stereo Speakers

$599

Intel Pentium 133/166 ..... $599/649
Intel Pentium 200 ..... $699

MULTIMEDIA SYSTEM SPECIAL
- Mini Tower Case w/ 250 watt PS
- Intel PCI TX Chipset M/B
- 3.2 UDMA Western Digital Hard Drive
- 32MB SDRAM (168 PIN)
- 2MB Video
- 24X US Drive CD_ROM
- 56K Rockwell Chipset
- Voice,Fax,Modem w/ caller ID
- Yamaha 3D Sound Card
- Mitsumi 1.44 Floppy Drive
- Window 95 CD
- Win 95 Enhance Keyboard
- PS2 Mouse
- Stereo Speakers

$699

AMD 233MMX $699
Intel 233MMX $749

PENTIUM II SPECIAL
- Mid Tower ATX Deal Fan Case w/235Watt PS
- Intel 443LX Chipset M/B w/512K cache
- 4.3 UDMA Western Digital Hard Drive
- 32MB SDRAM (168 PIN)
- 4MB AGP Video
- 24X Creative Labs CD-ROM Drive
- 56K Rockwell Chipset
- Voice,Fax,Modem w/ caller ID
- Ensoniq PCI 3D Sound Card
- Mitsumi 1.44 Floppy Drive
- Window 95 OSR 2.5 CD w/ USB Support
- Win 95 Enhance Keyboard
- PS2 Mouse
- Stereo Speakers

$949

Pentium II 235/266 ..... $949/1049
Pentium II 300/333 ..... $1199/1399

Video Cards
Diamond Viper V330 AGP 4MB $115
Diamond Monster II 3D 8MB $195
Diamond Stealth 3D 2000 2MB $45
S3 Trio64V+ PCI 2MB EDO $35
Matrox Millennium II 8MB $209

Monitors
14" Impression $139
17" Relisys $299
17" NEC E700 ..... $599
17" NEC A700 ..... $499
19" ADI 6P $599

MULTIMEDIA & VGA
34x CD AUSU $79
24x CD $53
56K Rockwell PNP $59
Sound Yamaha 3D PNP $15
AWE64 PNP OEM/Retail $65/93

Hard Drive
3.2 GB HD $149
4.3 GB HD $165
6.4 GB HD $219
8.4 GB HD $299

or Toll-Free: 877-769-7000 408-296-7000

Hours: Mon.-Fri.: 10a.m. - 7p.m. • Sat.: 10a.m. - 6p.m. Sun.: 12p.m. - 5p.m.

3275 Stevens Creek Blvd.
Suite #106
San Jose, CA 95117
E-mail: csoutlet@aol.com
www.csoutlet.com

Computer System Outlet is not responsible for any typographical errors. Shipping, C.O.D. & Insurance are extra and non-refundable. 1-year warranty on new systems. 15% restocking fee will be charged on all returned items over 3 days.
ALL PRICES ARE FINAL ON DATE OF PURCHASE. All prices are subject to change without obligation or notice.

38 years after Y2K and Y2K2. Most UNIX systems keep time based on the number of seconds since the beginning of January 1, 1970 (which some people refer to as the Epoch). The item that carries that number is usually 31-bits long. This means that dates starting on January 19, 2038, cannot be represented. Like in the Y2K problem, programmers are saying "that seemed long enough at the time", but even today, people are finding problems with using time functions on UNIX for referring to times 40 years in the future.

The Y2038 problem will most likely be completely fixed within five years from now, except for systems that cannot be upgraded. Many UNIX people assume that they will simply change from 31-bits to 63 or 64-bits for storing dates and be done with it. As with the Y2K2 problem, the change will be easy to understand, but it will not be trivial. All programs that use UNIX system dates and assume that those dates are 31-bits long will have to be changed at the same time as the new longer dates are used.

The most likely scenario for fixing the problem is that UNIX systems will keep two dates: 31-bit dates and 64-bit dates. Programmers can keep using 31-bit dates at their own risk, but it will be only a small change to their software to switch to 64-bit dates. As long as all the operating system utilities get updated at the same time, the newer systems should work just fine. Other people have suggested different fixes for the Y2038 bug, such as going from 31-bits to 32-bits.

I'll be very happy to look back on January 15, 2000, and say, "Boy, I'm glad I overestimated the Y2K problem," but I agree with the many people who think that the Y2K problem is going to cause thousands of deaths for a variety of reasons.

Y2K Is Still The Monster To Deal With

Both the Y2K2 and Y2038 problems are tiny compared to the Y2K problem. Many fewer systems have either of these "later" date problems, and those that do are not nearly as important as the financial and transportation systems that are known to be riddled with Y2K bugs. If there was no Y2K problem, these other two problems would be worth focusing on in the short run; compared to the Y2K problem, they are mere irritants.

Yes, I'm saying that the Y2K problem is massive, and possibly so serious that it will be a crisis on the level of a war or a famine. I'll be very happy to look back on January 15, 2000, and say, "Boy, I'm glad I overestimated the Y2K problem," but I agree with the many people who think that the Y2K problem is going to cause thousands of deaths for a variety of reasons.

On the other hand, most of us are quite good at ignoring world problems that cause thousands of deaths. ◆

Copyright © 1998 by Paul Hoffman. All rights reserved.

Stock Chart continued on page 205

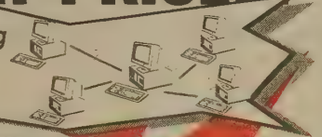
WE ARE INTEL AUTHORIZED DEALER

FREE LABOR FOR CPU/ MEMORYUPGRADE!

SUPER SALE! WE BEAT PRICES!

On-site service Available

Networking On-Site Service including: Software installation. Networking Set up, Wirelink Connection, ... Etc.)" Please Call now ! Also we sell Networking cables, Hubs, Repeaters, Ethernet Cards...



INTEL PENTIUM II 233/266/300/333/350/400 SYSTEM

- Intel 440 LX Chipset or BX Chipset Motherboard
- CPU w/ Cooling Fan w/512K Cache
- Motherboard w/AGP Slot
- 16MB Memory • 168 Pin DIMM
- 2GB Hard Drive
- 1.44Floppy Drive Teac or Sony
- 12X CD-ROM
- SVGA Card w/2MB
- ATX Med-Tower Casew/Power Supply
- 104 Enhanced heyboard
- Serial Mouse and Mouse Pad

Best Buy

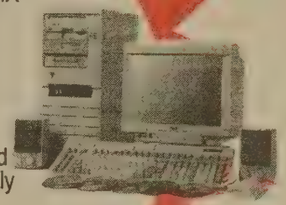
$636/686/814/956/1121/1344

VAR, Dealer, Wholesale welcome

Service Since 1991

System with Multimedia

- P5-166/200/P6-200/233/266/300MMX
- Motherboard PCI+ISA+512K Cache
- 16MB Memory EDO Memory
- 2GB Hard Drive
- 1.44MB Floppy Drive - Teac or Sony
- SVGA 64-Bit 4MB Video
- 12X CD-ROM
- Sound Blaster 16 Compatible 3D Sound
- Mini-Tower Case + 250 W Power Supply
- 104 Enhanced Keyboard
- Mouse and Pad
- 4-CD Titles



$393/393/393/411/504/598

- PC Repair & Upgrades Welcome
- Custom Configuration Available
- PC Components Available
- We Beat Prices
- Please Call Us For Current Prices!
- Corporate Accounts Welcome

MULTIMEDIA UPGRADE

- 16-Sound Card
- Speakers 100W & Cable
- Driver Disk • 4 CD Titles

Free Labor

12X CD-ROM Package	$88
24X CD-ROM Package	$105
32X CD-ROM Pachage	$134

COMPUTER UPGRADE

- Green (Energy Saving) Motherboard w/ 512K Pipeline Burst Cache
- Install/Labor
- Complete System Checkout

Free Labor

P5-166	$165
P5-200	$165
P6-200MMX	$165
P6-233MMX	$190
P6-266MMX	$285
P6-300MMX	$385

INTEL PENTIUM WORKSTATION MULTIMEDIA SYSTEM

- 133/150/166/200/166MMX/200MMX/233MMX
- Motherboard PCI+ISA+512K Cache
- 16MB Memory
- 2 GB Hard Drive
- 1.44MB Floppy Drive
- 1MB SVGA PCI Card
- 12X CD-ROM
- Mini-Tower + 250W Power Supply
- 104 Enhanced Keyboard
- Mouse and Pad

$408/418/418/CALL/436/445/475

MOTHERBOARDS

- Pentium II Intel Motherboard 233/266/ 300/333MHz no CPU $115
- Pentium Pro Intel Venus 150/180/ 200MHz no CPU $130
- Pentium/Cyrix/AMD 75/90/100/120/133/ 150/166/200/233/266/300MHz Motherboard 512K Cache w/EIDE/ I/O .. $85
- 486 PCI + ISA Motherboard 128K Cache no CPU $65

SOFTWARE

DOS 6.22 W/SYSTEM	$32
Microsoft Windows 95 w/System	$78
Microsoft Windows NT 3.51/4.0	$Special
Microsoft Office Pro for Windows 95	$Special
Windows 3.11	$41
Windows 3.11 for Workgroup	$51

AMD K6-686 SYSTEM 200/233/266/300MMX

- CPU w/Cooling Fan
- Motherboard w/512K Cache
- 16MB Memory EDO 60ns
- 2 GB Hard Drive
- 1.44MB Floppy Drive Teac or Sony
- 12X CD-ROM
- SVGA w/2MB PCI
- Mini-Tower w/ 250W Power Supply
- 104 Enhanced Keyboard
- Serial Mouse and Pad

$421/439/523/633

MONTHLY SPECIAL

SPECIAL-SALES & UNBEATABLE PRICES

Mono Monitor 12"	$1
Mozart 16 Bit Sound Card	$1
2400 Modem	$1
96/24 Fax/Modem	$1
MFM Hard Drive	$1
Power Cord	$1
8-Bit Sound Card	$1
AMD DX2-66 CPU 3.3V	$5
Intel 486DX33 CPU	$5

First Come, First Serve!!!

FAX/MODEMS

USRobotics 56K Fax/Modem(int.)	$107
USRobotics 56K Fax/Modem/Voice	$117
33.6 Fax/Modem/Voice	$38
PCMCIA Fax/Modem 56K	$107

DVD MULTIMEDIA SYSTEMS

- 64MB RAM (128MB: add $Call)
- 6.4GB EIDE (8.4GB: Add $130)
- 2X DVD ROM
- US Robotics 56.6 Fax/Modem (Internet-Ready)
- Matrox Millenium II 8MB AGP or PCI
- Sound Blaster AWE 64 Value or Yamaha Sound
- Yamaha Speakers or 400W Deluxe Speakers
- Teac or Sony 1.44 3.5" Floppy Drive
- Med Tower ATX Case w/Power Supply
- Keytronics Keyboard for Windows95
- Microsoft Mouse w/Pad
- Free Microsoft Windows 95 • Free 4-CD Titles

Intel Pentium 400	$2105
Intel Pentium II 350 (Intel 440LX Chipset) ATX	$1882
Intel Pentium II 333 ATX	$1731
Intel Pentium II 300 ATX	$1590
Intel Pentium II 266 ATX	$1462
Intel Pentium II 233 ATX	$1416
Intel Pentium 233MMX	$1268
Intel Pentium 200MMX	$1243
Intel Pentium 166MMX	$1238

MONITORS

14" NI SVGA 1024X768 .28DP	$135
15" NI SVGA 1280X1024 .28DP	$165
17" NI SVGA 1280X1024 .28DPI	$325
21" SVGA	$890

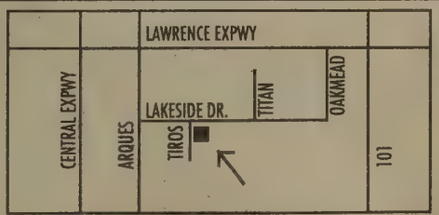
HARD DRIVES/BACKUP

HARD DRIVES

1.2GB EIDE/1.7GB EIDE	$119/130
2.1GB EIDE/2.5GB EIDE	$Call/Call
3GB	$Call
4GB	$Call
6GB	$Call
8GB	$Call

BACKUP

Colorado T-3000 3.2GB Int. w/Tape	$165



LEGEND COMPUTER Inc.

Tel. (408) 720-0818 U.S.A.

Fax (408) 720-0819
1225 Tiros Way
Sunnyvale, CA 94086
Business Hours:
M-F 9:30am-6pm: Sat.10am-4pm

EMail: LegendComp.AOL.COM

TERMS & CONDITIONS

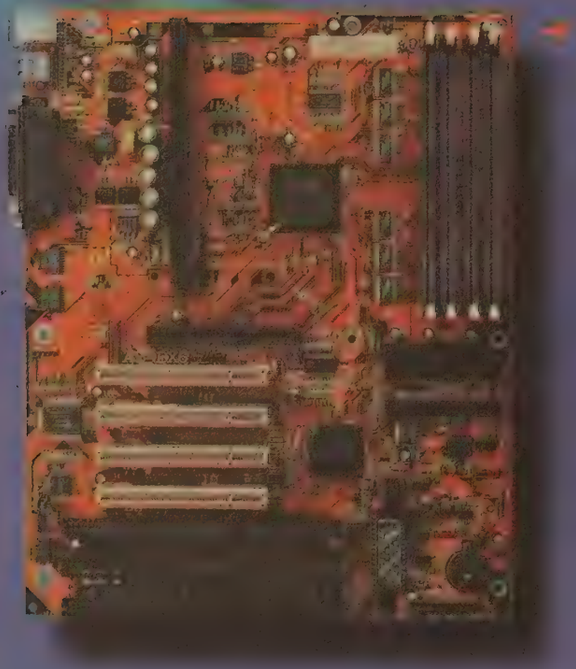
1. Lifetime Labor warranty system & one year parts warranty.
2. Knowledgeable technical support engineers in service.
3. Prices and availability subject to change w/o notice
4. Shipping, insurance and COD charges are extra and nonrefundable. Prices reflect cash discounts.
5. Return shipping must be insured, prepaid and bearing an RMA# on the shipping label.
6. Defective items replaced or repaired at our discretion.
7. No responsible for typos.
8. All returns subject to 15% restocking fee and cover only Legend brand computer, excludes peripherals and software. No refunds after 30 days.
9. Superior reputation for service, quality and value.
10. Purchase orders are welcomed and subject to approval.

** With system Purchase, Limit one piece per system purchase.*

ABIT'S REL
GREENLEA

Are you ready for speed?

Introducing **ABIT's New 100MHZ 440BX Based Mainboard, the BX6**
With 6 Chip Data Buffer and Capabilities to Change CPU Voltages.



ABIT's BX6 includes the following:

1. Soft Menu II™ the new generation of jumperless CPU autodetection
2. Write Protect Anti-Virus Function from Award's BIOS to protect the vital Boot sector of your hard drive.
3. Year 2000 ready and fully compliant. No worries here.
4. 6 chip data buffer solution recommended by Intel for increased Ram stability when using 4 DIMMs of SDRAM/8 Banks of memory.
5. Top quality 48 Pin clock generator to allow specialized functions such as 133Mhz.
6. Top quality tantalum capacitors for increased long term reliability.
7. Hardware monitoring thanks to National Semiconductors LM79 chip which checks on system temperature, system voltage and system fan speed.

Authorized Distribution

GREENLEAF DISTRIBUTION, INC.
4900 Patrick Henry Dr.
Santa Clara, CA 95054
Tel: (408) 982-9333
Fax: (408) 982-1622

mini-micro
4900 Patrick Henry Dr.
Santa Clara, CA 95054
Tel: (408) 327-0388
Fax: (408) 327-0389

LE PARTNERS
MINIMICRO

Customers List:

A&A Computers	408-748-8533
AAA Computers & Technology	510-623-7255
Access Computers and Cellular	916-773-4600
Acme Micro-system Inc.	510-226-6770
Acrologic systems	408-263-9889
Advanced Digital Solutions	408-262-1200
Aim Computer	510-687-5212
Alacom Computer	510-668-0368
Alternative Micro Systems	408-654-9500
American Advantech	408-245-6678
American Computer	408-257-8998
Ameritech Computer Service	415-282-6500
Anderson Microtech	408-528-0101
Anton Microsystem	650-424-3243
Aquality Computer Supply	408-923-1762
Area Computer Service	510-843-0388
Arm Systems	707-795-0800
Aroma Computer	408-736-4355
ARS	209-943-2448
ASA Computers Inc.	408-941-0808
Atman Computer	415-456-9339
Bam Computer	510-606-6335
Bay Computer	510-440-9107
Bay Computer Inc.	408-956-8014
Baywell Technologies	408-229-9355
Besq Systems	408-942-6161
Beta Nineties Computer	415-974-1188
Big Bang Technology	408-954-1160
Blue Star Microsystems	408-209-1737
Byte Beast Computer	510-489-2491
Byte Brokers	916-334-2984
C & P Technology	408-732-5218
Cal Net	408-736-5478
California Digital Computer	408-956-8200
California Electronics	415-382-1500
CCS International	408-526-1688
Central Coast Computers	408-626-6885
Central Computer Center	408-248-5888
Chicotec Inc.	408-954-8998
City Com	510-475-2680
Comart Business	415-864-8999
Commtech Computer	510-441-9154
Comp Express	510-739-1000
Compu Systems	650-246-3900
Compusales & Serv.	415-453-3644
Computer Center	510-538-7368
Computer Quick	415-861-8335
Computer Tyme	408-984-8963
Computer Works	505-298-7207
Computermania	209-261-1688
Computers USA	510-672-9989
Computerworks	530-283-3650
Computown Inc.	650-962-8696
Comtek	408-249-4297
Comteq Computer	408-970-4662
Comwise Int'l	408-263-9900
Copfax Int'l	408-730-2275
Cupertino Computer	408-255-5997
D J Computer	510-527-7697
Data Com	415-398-8903
Data Tek Computer	650-965-9003
Database Specialties	415-981-6666
Day & Night	408-427-0890
Deanza College	408-864-8232
Design Engineering	510-601-7926
Destiny Computer	510-783-2727
"Digicle, Inc."	408-327-8898
Digisystem	408-885-9490
Direct Service	408-980-1414
Distar Tek	408-943-1599
Domino Computer	415-453-8525
Domino Computer	415-505-3787
East Gate Micro Inc.	408-262-8226
Edge Technologies Corp.	510-249-1999
Electronic Network Tech	510-462-7125
Empac Int'l	510-683-8800
ESC Technologies	209-550-4995
Ethernet Computer	408-363-3945
Excel Computer	916-736-0322
Excel Computer	408-261-0496
"FDY Softward, Co."	408-248-1988
Federico Consulting	209-224-5922
Focus Computer	510-659-8822
For Your Computer	408-437-8718
Foresight Micro Inc.	510-353-9161
Frontier Tech. Frank	408-249-0327
Future Computer	510-455-3768
FX Communications	510-477-9000
GR Companys	916-983-0785
Hardware Knowledge Group	408-733-5454
HD System Inc.	408-986-9898
Hess Computer Product	707-256-1999
Hi-Q E.C.W Enterprise Inc.	408-245-5836
Hi-Tech USA	408-262-8688
Infotek	408-929-4094
Integrated Computer Company	408-441-6890
Interactive Tech.	510-739-1354
International Technology Computer	408-956-8866
International Trading Corp.	650-794-0920
ISC Computer & Communications	408-227-2286
Isolink Systems	510-226-7071
King System	510-659-1699
Kings Valley Trading	650-508-1558
Kingstar Computer	408-736-4150
KIS Computer	510-490-5471
LAK Micro Supply Inc.	408-954-0640
Leapfrog Lab	510-360-0270
Legend Computer Inc.	408-720-0818
Ltm	408-422-0300
Mantis Computers	707-553-1711
Maxtree Inc.	408-946-8298
MC Systems	408-293-9228
Mcom Computer	408-736-9328
Menstor	510-683-9200
"Meridian Data, Inc."	408-461-5148
Micro Cell Computer Corp.	209-956-4952
Microtech International	510-249-9100
Microtmatics	408-970-8567
Mid Cities Computers	562-867-0626
Mtek	916-483-9363
Net80	510-249-1310
Network California	408-298-6300
Nova 2000 Corp.	408-432-3888
Octave Systems	408-866-8424
Oliver World Class Lab	510-651-6720
PC Ten West Gate	510-652-5268
PDP System	408-944-0301
Perfect Computer	510-440-8345
Perkins Computers Associates	916-927-2081
Phase Enterprises	909-598-5970
Pixel USA Computer	408-293-8333
Polywell	650-583-7222
Priority Computer Parts	530-272-8084
Proven Technology	408-946-3838
Q Digital	510-796-2900
Rieckhoff & Assoc.	707-428-4295
RM Schultx Assoc.	510-283-1460
Scinet Inc.	408-328-0160
Sezam Technology	510-445-1908
Silicon Micro System	408-244-4079
Spectrum Peripherals	415-387-6362
Summit Micro Design	408-278-8728
Sunrise Microsystem	408-744-9655
Suntronics Inc.	408-934-0708
Superpower Supply	510-476-1388
Supertech	408-988-1234
SWA Computers	650-875-7588
TCS System	707-441-4184
The Computer Store	650-842-0500
The PC Connections	916-939-2261
Top Data	408-734-9100
Tradewind Enter	650-726-0188
TRC	408-435-2800
Trial System Corp.	510-373-2046
Truecomp America Inc.	408-292-8889
Truecomp Inc.	916-682-7777
UC Computer	510-649-6089
Ultraserv	408-281-1622
Uncommon computers	650-949-5595
Universal Computer Products	415-583-9736
Upgrades UnLimit	408-773-9655
US Machinery	510-623-9040
USA Comp. Mart	510-792-0140
VA Research Inc.	650-934-3666
Verital Combatzon	916-898-1500
Virtual Micro Computer	510-657-2735
Viva Computer	510-490-4988
Whole Computer	408-734-8866
Xinetron Inc.	408-727-5509
Zoommax Computers	916-428-6777

ABIT

Check out more of the details at ABIT's web site at: **http://www.abit.com.tw**

Four Rules For Net Success

And Not A Lot Of Hot Air

By David Kline

The Internet is not just a new sales channel, it's also a school for learning how to conduct business in the 21st century and a laboratory for creating new and more powerful customer relationships.

For years, wild-eyed cyberpundits have been making fantastic claims of mass market-size retail sales on the Web. And for years, I've gotten my kicks by reminding these hyperventilating utopians that the total dollar volume of consumer purchases online was only a fraction of today's market in blow dryers!

But I'm going to stop tormenting these Internet hypemeisters—at least where e-commerce is concerned. Online commerce appears to have finally surpassed the blow dryer business (and I don't just mean in the generation of hot air), soaring to perhaps upwards of $2 billion in consumer sales for the past year. So now that Net commerce is developing real economic potential, it's time to sum up what we have learned so far about the keys to online business success.

Profit vs. Loss

There's no doubt about what sells best on the Web: Information-rich products and services that save people time, money or inconvenience. But what if profit is slow in coming?

This question must be viewed in more than simply dollars and cents terms. As Internet pundit Esther Dyson put it, "It may not always be profitable at first for businesses to be online, but it is certainly going to be unprofitable not to be online." That's because the Internet is not just a new sales channel, it's also a school for learning how to conduct business in the 21st century and a laboratory for creating new and more powerful customer relationships. And unless established companies learn how to work in this new medium, they could find themselves left out in the cold in the business landscape of tomorrow.

Big vs. Smart

Any entrepreneur who thinks the Web automatically eliminates the advantages of size, brand clout, or financial and marketing muscle held by larger companies is a fool. Which would you rather be: Netscape or Microsoft? E-Trade or Schwab Online?

Nonetheless, there are opportunities for Internet pioneers to defend their turf against the entry of larger competitors in their field. Amazon.com, for example, is doing an excellent job beating back the recent challenge from the Barnes & Noble colossus. That's because Amazon has built a respected brand, developed a reputation for superior customer service, and forged alliances with hundreds of other content providers through an "Affiliate Program" that pays these sites a share of revenues from any Amazon books sold on their sites.

So while economies of scale still count, the beautiful thing about the Net is that it allows smart companies to "rent" their own economies of scale through the effective use of marketing and distribution partnerships.

Superiority vs. Ubiquity

Related to "Big vs. Smart" is this undeniable fact: A superior product and $1 will barely get you on the bus unless you have the distribution and marketing clout to stand out from the bewildering clutter of the Web marketplace today.

Take two competing e-commerce companies: One has superior transaction-processing software; the other has only an adequate product, but enjoys partnerships with major ISPs, Web-design firms, banks, and directory services such as Yahoo that provide access to their millions of customers. Which company would you bet on? Exactly.

In a "horizontal" medium like the Web, success chiefly depends upon leveraging other people's brand clout, marketing muscle, and distribution reach to attract and retain customers.

People vs. Systems

Branding online is far more challenging than in the offline world. That's because a good brand image depends not just upon your public relations staff, but also upon the experience of thousands or even millions of people when they encounter you on the Net. And if you don't deliver quality products and services as promised—or are not otherwise responsive to your customers—you're asking for trouble, because mistakes are very visible on the Web.

So are you wondering whether you should add fancy "agent" technology to your Web site, or hire more people to personally answer customer email?

Hire the people. ◆

Copyright © 1998 by David Kline. All rights reserved. This article originally appeared in Upside *and appears here by permission of the author.*

Now you get even more with the newest series from PCtown®

Introducing the Signature SERIES Complete with FREE Software Package, 15" Monitor & Color InkJet Printer

FREE Softwares:
- Lotus SmartSuite'97
- Panda Antivirus Protection
- Games

and more...
See store for details!

Microsoft Windows 95 Ready!

MMX intel inside pentium II

Panda Software

266 MHz Pentium® II
with MMX™ technology
Home Computer
- Intel® Seattle SE440BX 100MHz B.S. Motherboard
- 32 MB 100MHz SDRAM 168Pin exp to 384MB
- 1.44 MB FDD, USB I/O port
- 3.1GB EIDE Hard Disk
- USB 2-16550 High speed serial & 1 Parallel Port
- 24X Enhanced CD-ROM Drive
- 104K Enhanced Keytronics PS/2 Keyboard
- S3 Virge Gx2 AGP w/4MB SGRAM
- Mid Size ATX Tower case w/235w PS
- Logitech PS/2 Mouse & Pad
- 56.6K Fax/Modem w/Voice Mail
- Yamaha YM-715 Stereo Sound Built-in
- 60Watt Amplified Stereo Speakers
- Microsoft Windows® 95 OSR2
- **FREE 15" Monitor**
- **FREE Color Inkjet Printer**
- **FREE Software Package**

$1459.99

300 MHz Pentium® II
with MMX™ technology
Office Computer
- Intel® Seattle SE440BX 100MHz B.S. Motherboard
- 64MB 100MHz SDRAM 168Pin exp to 384MB
- 1.44 MB Floppy Disk Drive
- 4.3GB EIDE Hard Disk
- USB 2-16550 Serial & 1 Parallel Port
- 32X Enhanced CD-ROM Drive
- 104K Enhanced Keytronics PS/2 Keyboard
- ATI Xpert at Work AGP w/4MB SGRAM
- Mid Size ATX Tower case w/235w PS
- Logitech PS/2 Mouse & Mousepad
- 56.6 Fax/Modem w/Voice Mail
- Yamaha YM-715 Stereo Sound Built-in
- 60Watt Stereo Amplified Speaker
- Microsoft Windows® 95 OSR2
- **FREE 15" Monitor**
- **FREE Color Inkjet Printer**
- **FREE Software Package**

$1659.99

PCtown® uses name brand components to ensure top performance

Computown™ Upgrade Specials
with a purchase of any PCtown® system

Microsoft® NT 4.0 WorkStation	$99.99
Microsoft® Keyboard	$29.99
Microsoft® Intellimouse	$16.99
Iomega IDE Zip Drive	$99.99
32MB Dimm Memory	$49.99
2X DVD Kit	$259.99

TRADE-IN NOW that old Desktop, Laptop Computer or Laser Printer and receive credit towards a NEW purchase!

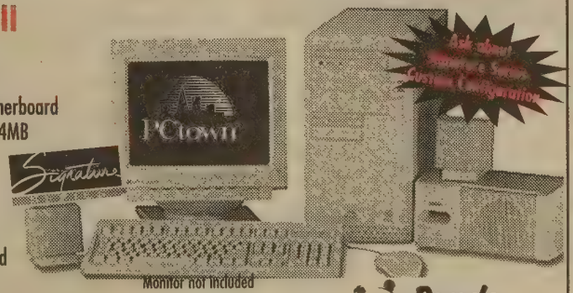
your old equipment can help pay for your NEW purchase! Call for details.

333 MHz Pentium® II
with MMX™ technology
Ultimate Computer
- Intel® Seattle SE440BX 100MHz B.S.Motherboard
- 64MB 100MHz SDRAM exp to 384MB
- 1.44 MB Floppy Disk Drive
- 6.4GB Enhanced IDE Hard Disk
- USB 2-16550 Serial & 1 Parallel Port
- 32X Enhanced IDE CD-ROM Drive
- 104K Enhanced PS/2 Keyboard
- Diamond Fire GL 1000 Pro AGP w/8MB
- Mid Size ATX Tower case w/235w PS
- Microsoft IntellimousePS/2 Mouse & Mousepad
- 56.6 Fax/Modem w/Voice Mail
- Built-in Crystal PCI Stereo Sound
- Altec Lansing Speaker w/Subwoofer
- Microsoft Windows® 95 OSR2
- Iomega Internal EIDE Zip Drive
- **FREE Software Package**

$1999.99

400 MHz Pentium® II
with MMX™ technology
Multimedia Computer
- Intel® Seattle SE440BX 100MHz B.S.Motherboard
- 64MB 100MHz SDRAM 168Pin exp to 384MB
- 1.44 MB Floppy Disk Drive
- 8.4 GB Ultra DMA IDE Hard Disk
- USB, 2-16550 Serial & 1 Parallel Port.
- Dxr2 DVD ROM Drive Kit
- 104K Enhanced Keytronics PS/2 Keyboard
- Mid Size ATX Tower Case w/235PS
- ATI Xpert@Work AGP w/8MB SGRAM
- Microsoft PS/2 Mouse & Mousepad
- 56.6 Fax/Modem w/Voice Mail X2 Comp
- Built-in Crystal PCI Stereo Sound
- Altec Lansing Stereo Speakers w/Subwoofer
- Microsoft Windows® 95 OSR2
- **FREE Software Package**

$2499.99



Monitor not included

Microsoft Windows 95 Ready!

DVD VIDEO DVD ROM

Panda Software

MMX intel inside pentium II

iomega

PCtown® uses name brand components to ensure top performance

MOUNTAIN VIEW
PRICE & AVAILABILITY
(800) 498-8696
RETAIL SALES
(650) 962-8696
CORPORATE SALES
(650) 967-8999
REPAIR & SERVICE
(650) 938-8324
Mon - Fri 9am to 7pm
Sat - Sun 10am to 5pm
2065 West El Camino Real

SAN FRANCISCO
PRICE & AVAILABILITY
(800) 655-8696
RETAIL SALES
(415) 956-8696
CORPORATE SALES
(415) 956-1777
REPAIR & SERVICE
(415) 982-8324
710 Market Street

PLEASANT HILL
SALES & SERVICE
(925) 682-8696
1525 Contra Costa Blvd

SAN JOSE
PRICE & AVAILABILITY
(800) 897-0771
SALES & SERVICE
(408) 275-8696
CORPORATE SALES
(408) 383-9050
780 Montague Expressway/O'Toole

NOVATO
NETWORKING, SALES & SERVICE
(415) 899-8696
(707) 588-8696
140 Vintage Way, Suite G12
Vintage Oaks Mall

The Intel Inside logo and Pentium are registered trademark and MMX is a trademarks of Intel Corporation. IBM is a registered trademark of International Business Machines Corporation. PCtown® is registered in the U.S. Patent and Trademark Office. The Energy Star emblem does not represent EPA endorsement of any product or service. Windows® is a registered trademarks of Microsoft Corporation. Computown is not responsible for typographical errors. Limited to stock on hand. Prices/specifications are subject to change without notice. Prices may vary from store to store. All other marks are trademarks or registered trademarks of the products with which the marks are associated. This waiver applies to all Computown advertisements. *Low price guarantee and price matching policy refer to authorized dealers only, on in-stock, new in-the-box products. Competitor's advertisement must be presented. Prices change daily, please call for current pricing. See store for details.

Prices good at Mountain View store only.
Expires on June 16, 1998. While supplies last.
Online:www.computown.com

For your convenience, we accept

VISA MasterCard AMERICAN EXPRESS CHECK

FREE PARKING — 1 hour validated parking with purchase @ SF 5th & Mission Garage or Hearst Parking Garage

OPEN 7 DAYS — San Francisco Mountain View

PRICE MATCH — Upon salesperson's verifications

Computown™

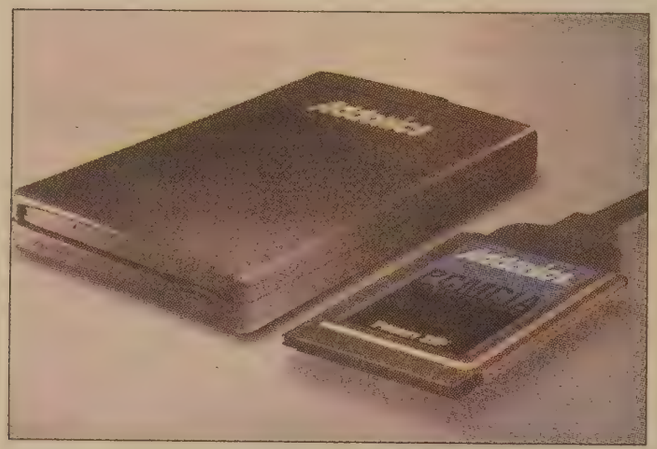
Desktop Computers

A PC Card Zip Drive

Making Portability A Possibility

By Ed Kahn

The real value of the Pocket Zip drive, however, is that it lets you get a lot more use from older portables that have smaller hard drives.



In spite of being included on virtually all portable computers, the 3.5" floppy drive is nevertheless doomed to become a thing of the past. CD-ROMs have become a more common method of distribution and hard drives are the real guts of data storage once a system is up and running.

Still, the frustration of floppy disks remains, as no alternative has yet captured the market. These days, the closest thing to a new standard is Iomega's Zip drive. Manufacturers are increasingly offering new computers with an option for the internal Zip drive. While I have not yet seen Zip disks used for software distribution, more and more people are relying on them for backups and portability.

I was interested to see Addonics Technologies announce its Pocket Zip drive. It is designed squarely for the portable market and promises to find a welcoming audience. The Pocket Zip is a Zip drive licensed from Iomega, but is housed in a smaller case and connects to the computer through a PC Card rather than a parallel or SCSI port.

The Pocket Zip measures 7" deep by about 4.5" wide, is less than 1" thick and weighs just 13oz. In sharp contrast to a conventional Zip drive, this unit gets its power through the PC Card. If for some reason the PC cannot supply enough power or you want to conserve your computer's batteries, a power supply comes with the Pocket Zip. Just slide the switch on the back of the drive to indicate that you will be getting power from the power supply rather than through the PC Card interface. Needless to say, the Pocket Zip is a real Zip drive and uses standard Zip disks. You can easily exchange disks with other Zip drives.

Addonics includes a tools disk containing all of the standard utilities that a Zip drive has, but also has a recording utility that lets you record up to ten hours of music or voice on a single Zip disk. A Guest program lets you painlessly install the drive in any Windows 95 system without having to let the computer recognize new hardware.

With many portables having relatively smaller hard disks, this portable Zip drive is a welcome friend. Pocket Zip is great for backups and comes with complete software for that purpose. Also, there is a utility that will let you keep a complete index of your Zip disks on your hard drive so you can easily learn on which disk a particular file can be found.

While the Zip drive works as expected, I tried to put it through its paces and found that it would not work with Norton Utilities Rescue utility. This is a utility that comes as part of the Norton package. I was anxious to try to create a Rescue disk on a Zip disk because, according to the Norton information, this rescue disk would let me open up inside of Windows rather than just getting back to a DOS prompt. I was curious about whether this would actually work because the PC Card is not recognized until you get inside Windows 95 and I could not imagine that it would work for restoring or diagnosing Windows problems. Indeed, when I tried to reboot using the disks Norton had made, I eventually got to a place that said it could not find the Zip drive. It was looking for either a SCSI or parallel form of the drive. I was not surprised. If the PC Card reader were recognized before getting to Windows, I suspect there would not have been a problem.

If I had been willing to devote the time to solving this problem, I think it could have been overcome. The real value of the Pocket Zip drive, however, is that it lets you get a lot more use from older portables that have smaller hard drives. There are lots of products, by the way, that attempt to pump new life into an older portable. Almost every week I get a press release about another company that is offering a solution for the too-small hard drive problem. While you can get new larger hard drives, the theme of these press releases is that there are now companies

The Best Prices & Service Since 1992

LIFETIME Support

ACADEMIC Reseller Microsoft Symantec

48-HOUR Service Guaranteed

Upgrades & Repairs for all Notebooks

NETWORKING SOLUTIONS

HEWLETT PACKARD Authorized Dealer

Complete MultiMedia Systems at Blowout Prices. We use only name brand components.

DESKTOPS

SUPER SYSTEM with Intel Pentium® II

- Intel Pentium® II Processor with MMX Technology
- Motherboard w/440LX Intel® Chipset
- 4.3GB Ultra DMA Hard Drive
- 32MB SDRAM
- Toshiba 24X CD-ROM
- 56K Fax/Modem
- 3D Sound Card •4MB Video RAM

P-II Celeron™ 266 . . . $925
P-II 233MHz $949
P-II 300MHz $1019
P-II 350MHz $1149
P-II 400MHz $1649

PERFORMANCE SYSTEM w/Intel Pentium® Processor

- Intel Pentium® Processor with MMX Technology
- Motherboard w/TX Intel® Chipset
- 3.1GB Ultra DMA Hard Drive
- 32MB SDRAM
- Toshiba 24X CD-ROM
- 36.6K Fax/Modem
- 3D Sound Card
- 4MB Video RAM

P-166MMX $929
P-200MMX $949
P-233MMX $979

15" Color Monitor Included

Call for Custom Configuration, Network Servers, Workstations!

NOTEBOOKS

Model 3300 Notebook

•233MHz Pentium® MMX
•32MB RAM
•2GB Hard Drive
•12.1" Active Color Display
•USB Port

Best Value $1399

Call For Upgrades & Options

Model CH9780 Notebook

•233MHz Pentium® MMX
•32MB RAM
•2GB Hard Drive •4MB Video
•14.1" Active Color Display
•USB Port
$1999

Model AS6000 Notebook

•266MHz Mobile Pentium® MMX Upgradeable to Pentium® II
•32MB RAM •2GB Hard Drive
•2MB Video
•13.3" Active Color Display •USB Port
$2650

Model KP7200 Notebook

•233MHz Pentium® MMX
•32MB RAM •2GB Hard Drive
•4MB Video
•14.1"/15.1" Active Color Display
$1899/2599

DISCOUNT CENTER • SAVE BIG $$$!

Iomega Jaz Drive Ext. SCSI 1GB. **$239**
Syquest 1.5GB Drive, Parallel Port **$269**
Jazz Disk 1GB **$75**
PCMCIA 33.6K Fax/Modem **$45**
Practical Peripherals Internet Kit (33.6K Fax/modem w/Internet Software & Virus Scan) Lifetime Warranty **$65**
Xircom PCMCIA 28.8K Fax/Modem/Lan Combo Card 10BT/10B2, 5 Year Factory Warranty. **$185**
Portable Speakers & Microphone for Notebook Computers, Powered by PS/2 Port **$12**
Adaptec 2940 PCI SCSI Controller **$137**

Leasing and 0% Financing Available

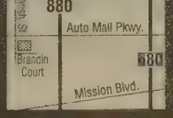
Cypress Computers

Visit Our Web Site: www.cypress-computer.com

HEWLETT PACKARD Authorized Dealer

SUNNYVALE
568 Weddell Drive, Suite 2
Sunnyvale, CA 94089
800-613-3540 • 408-541-0339
Fax: 408-541-0169
e-mail: sunnyvale@cypress-computer.com

FREMONT
5171 Brandin Court
Fremont, CA 94538
800-728-6688 • 510-668-1330
Fax: 510-668-1498 • Sat. by Appt.
e-mail: fremont@cypress-computer.com



Hours:
M-F 9-6
Sat 10-12 & 1-4

VISA MasterCard

Prices subject to change without notice. Not responsible for typographical errors. All prices reflect cash prices.

that will sell you more than just a replacement hard drive. They also give you software to let you image everything from your current hard drive to the replacement so all you have to do is install the new drive. This makes the problem of transferring the operating system and hidden files go away. The second thing these products give you is a case that holds the old hard drive so you can use it for additional storage or backups rather than keep it as a paper weight.

I have not tried any of these products, but get enough announcements so that I believe it is a viable technology for upgrading an aging laptop.

In the meantime, I am delighted to see the Pocket Zip. It carries a list price of $299, but Addonics said they expect the street price to be closer to $250. While this is more expensive than a standard Zip drive, I think it's well worth the extra money because of the added convenience of a smaller size and not having to be dependent upon a single power supply.

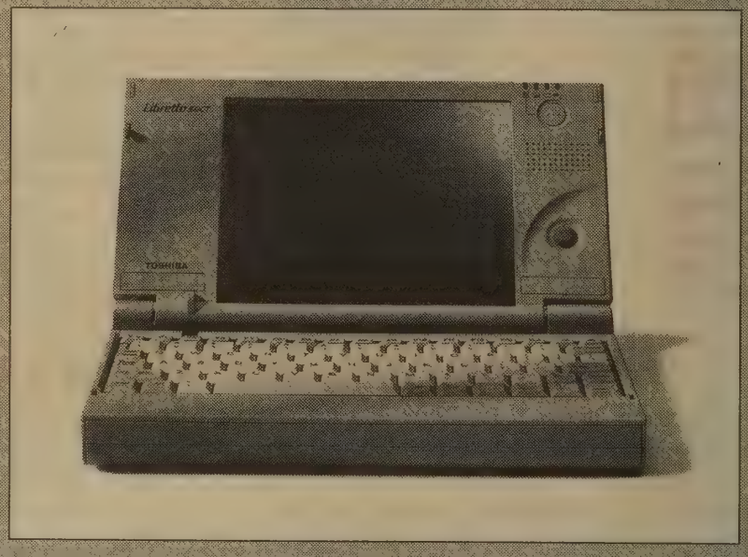
If you have been tempted by the increasingly universal Zip drive, the Pocket Zip may just be the solution you have been looking for.

Resources:

Pocket Zip, $299
Addonics, Inc.
48434 Milmont Dr.
Freemont, CA 94538
1-800-787-8580

Computer of the Month

Toshiba's Libretto 50CT



As the notebook computer field matures, niche market computers are being introduced. I applaud this development, as there are many times when the standard system is simply overkill. Specifically, many of us want something to travel with something that lets us check email and write an occasional memo. Slim portables are often too bulky for this. Toshiba's Libretto is tailor-made for this job.

HEWLETT PACKARD digital COMPAQ sun microsystems

On-Site Printer, Computer, & Network Service

1 Hour • Most Repairs

☆ Quick Response & Service Time
☆ Complete Repairs
☆ Maintenance
☆ Warranty Service
☆ Upgrades
☆ Leasing
☆ Short-Term Rentals
☆ Serving the Entire Bay
☆ Service Center

Call Us, We're Different!

Since 1987

GIGABYTES

510-440-8032 Fax 510-440-9099
47061 Warm Springs Blvd., Fremont, CA 94539

apple Microsoft IBM TOSHIBA NOVELL

need t-shirts?

Just read Joe's story.

A friend told Joe about a company called Century Graphics that does custom printing on t-shirts. Joe called Century Graphics and found out that he could also get polos, sweats, jackets, caps and more. He could even send his artwork by e-mail. He got a price for t-shirts and shouted,

"Hey, we can afford this!"

7.37 ea. for 25
5.78 ea. for 50
4.99 ea. for 100

White Beefy Ts. One color, One Location.

It was so simple. All screen and set-ups were included and there was also one hour of free artwork with every order.

About One week later, the order was done. When the group saw their shirts - they loved them. Everyone always thought Joe was pretty sharp; now they know.

(408) 616-7700

CENTURY GRAPHICS
Screen Printing & Design

visa & mastercard

embroidery

155 Commercial St., Sunnyvale, CA 94086

fax. (408) 616-7733
sales@cgshirts.com

Your Business Thrives on Market Demand...

Serving the Computer Reseller Market Since 1983

Toshiba, a world-renowned manufacturer of CD-ROMS & Notebook Drives, offers...

Preferred Choice of Major OEMs Worldwide, 5 Years in a Row

... Best multimedia performance among *CD-ROM Drives ...*
- PC World

32X CD-ROM Drives

- ATAPI and SCSI
- 85 and 90ms Random Access
- Plug and Play
- 256KB Buffer
- 2.07MB/s to 4.8MB/s Transfer Rate

In Touch with Tomorrow
TOSHIBA

Slimline Notebook Drives!!

- 2.1GB, 3.2GB and 4.0GB
- 12.7mm Height
- 13ms - 25ms Seektime
- 81- 88 - 91Mb/sec. Transfer Rate
- ATA-4 Interface

Used by Virtually all Major OEM Notebook Manufacturers

Volume Pricing Available!

KDS, a leading monitor manufacturer offers Visual Sensations...

KDS

VS-19 & VS-21

- 19", 21" Enhanced Display Monitor
- 0.28mm Dot Pitch
- 1600 x 1200 Max. Resolution

... do yourself a favor and look at the KDS VS-19 ...
- Desktop Publishers Review - Dec. 97

VSx-7

- 17" Multimedia Monitor
- 0.28mm Dot Pitch
- 1280 x 1024 Max. Resolution

...for a multimedia monitor, you won't be disappointed with the KDS VSx-7.
- Computer Shopper Review - Oct. 97

Visual Sensations...

KDS ADVANCED REPLACEMENT SERVICE KARES EXPRESS

KDS Advanced Replacement Express Service

- Full 3Yr Warranty Coverage/90 Day DOA
- 72 Hour Fed-Ex Express Service
- Lifetime Service & Support for end-user
- No Product Handling for Resellers

...and Mini-Micro Supplies the Demand.

System Integrators and Resellers call:

1-800-275-6427
16610 E. Chestnut St. City of Industry, CA 91748

1-800-275-4642
4900 Patrick Henry Dr. Santa Clara, CA 95054

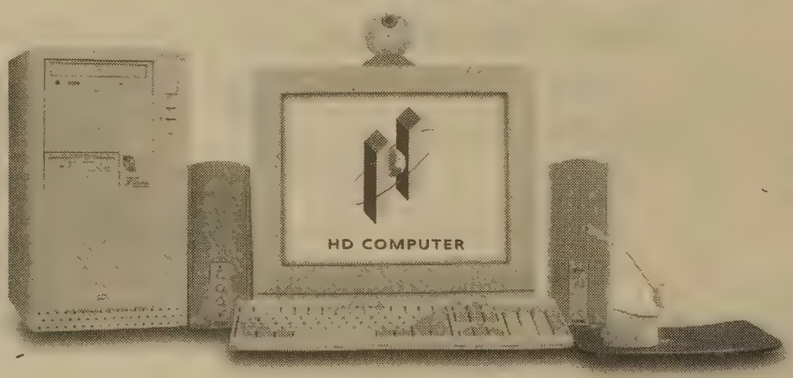
See our new web site!
www.mini-micro.com
mini-micro SUPPLY
A GREENLEAF COMPANY

98 Mini-Micro Supply. All logos and marks are trademarks or registered trademarks of their respective owners. Specifications are subject to change without notice.

HD COMPUTER http://www.hdcomputer.com

HD COMPUTER –

3-YEAR WARRANTY ON ALL COMPUTER SYSTEMS!*



AVerMedia EZCapture Video Conferencing Kit

Includes:
- *AVerMedia EZCapture PCI Video Capture Board*
- *Stand Microphone*
- *Digital Color Camera*
- *Full Software Package for Video E-Mail, Video Conferencing, Image & Video Capture on your PC*

Capture Images or Video for your Documents, Presentations or Web Page

COMPAQ · IBM · HEWLETT PACKARD · TOSHIBA · intel · WESTERN DIGITAL · Seagate · NEC · SONY · ViewSonic "See The Difference!" · iiyama · NOKIA · MAC · adaptec · Tektronix · ASUS · Maxtor · NANAO · LEXMARK · EPSON · Panasonic · ATi · 3Com · DIAMOND MULTIMEDIA · Number Nine · MATROX MGA POWER GRAPHICS · US Robotics

BUSINESS HOURS: MONDAY — FRIDAY, 9:00 A.M. — 6:00 P.M. (FRESNO ALSO OPENS SAT 10:00A.M. - 6:00 P.M.)

SANTA CLARA
Tel: (408)986-9898 / Fax: (408)986-9989
980 Walsh Ave.
Santa Clara, CA 95050
EMAIL: hd@sc.hdcomputer.com

SAN FRANCISCO
Tel: (415) 434-8118 / Fax: (415) 434-8128
232 Montgomery St.
San Francisco, CA 94104
EMAIL: hdsf@worldnet.att.net

FRESNO
Tel: (209) 446-0809 / FAX: (209) 446-0819
6481 North Blackstone Ave.
Fresno, CA 93710
EMAIL: hdfresno@inreach.com

Whether you require a single PC System now or more than 400 systems per month - the Victoria Series PC Systems are the systems used by more professionals than any other local brand. Choose from one of our pre-configured models, or call our Trained Professional Sales Consultants for pricing on your custom configuration.
**Certain Notebooks, Palm Computers & PDAs have 1-Year Warranty. Call for details.*

Victoria PENTIUM II - BX with MMX™ Technology

- *Intel SE440BX ATX MB*
- *Intel BX Chipset*
- *64MB SDRAM Exp. to 384MB*
- *Mid Tower ATX Case w/235W*
- *Matrox Millenium II 8MB AGP*
- *U.S. Robotics 2X 56K Fax/Modem*
- *Western Digital 6.4 Ultra DMA EIDE HDD*
- *1.44 Floppy Drive*
- *Toshiba 32X EIDE CD ROM*
- *Yamaha YST-M15 10W Speakers*
- *104-Key PS/2 Enhanced Keyboard*
- *MS PS/2 Mouse & Pad*
- *MS Windows 95*

(Monitor not included)

350MHz **$1859**
400MHz **$1959**

intel inside pentium PROCESSOR

Victoria PENTIUM II - LX with MMX™ Technology

- *ASUS P2L97 ATX MB*
- *Intel LX Chipset*
- *64MB SDRAM Exp. to 384MB*
- *Mid Tower ATX Case w/235W*
- *Matrox Millenium II 4MB AGP*
- *U.S. Robotics 2X 56K Fax/Modem*
- *Western Digital 4.3 Ultra DMA EIDE HDD*
- *1.44 Floppy Drive*
- *Toshiba 32X EIDE CD ROM*
- *Yamaha YST-M7 5W Speakers*
- *104-Key PS/2 Enhanced Keyboard*
- *MS PS/2 Mouse & Pad*
- *MS Windows 95*

(Monitor not included)

233MHz **$1199**
266MHz..... **$1229**
300MHz **$1369**
333MHz..... **$1459**

intel inside pentium PROCESSOR

Victoria PENTIUM - TX with MMX™ Technology

- *ASUS TXP4 AT MB*
- *Intel TX Chipset*
- *32MB EDO RAM Exp. to 256MB*
- *Mid Tower Case w/235W*
- *Diamond Stealth 2000 Pro PCI / 2MB*
- *U.S. Robotics 2X 56K Fax/Modem*
- *Western Digital 2.1GB EIDE HDD*
- *1.44 Floppy Drive*
- *Toshiba 24X EIDE CD ROM*
- *Sound Blaster 16 PNP*
- *SP-935B 80W Stereo Speakers*
- *104-Key Enhanced Keyboard*
- *3 Button Mouse & Pad*
- *MS Windows 95*

(Monitor not included)

200MHz **$819**
233MHz **$869**

intel inside pentium PROCESSOR

Victoria VALUE - TX with MMX™ Technology

- *Pentium 430TX AT MB*
- *Intel TX Chipset*
- *32MB EDO RAM Exp. to 256MB*
- *Mid Tower Case w/235W*
- *Triden 9860 PCI / 2MB*
- *56K Fax/Modem*
- *Western Digital 2.1GB EIDE HDD*
- *1.44 Floppy Drive*
- *24X EIDE CD ROM*
- *16-bit Sound Card PNP*
- *SP-935B 80W Stereo Speakers*
- *104-Key Enhanced Keyboard*
- *3 Button Mouse & Pad*
- *MS Windows 95*

(Monitor not included)

MMX 200MHz ... **$719**
MMX 233MHz **$769**

intel inside pentium PROCESSOR

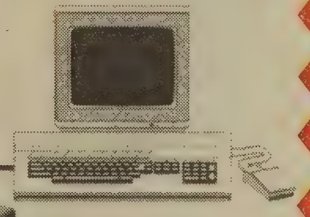
The Libretto falls between a palmtop and the sub-notebooks in size and features. Palmtop systems are often too small for managing email or looking at files. On the other hand, the sub-notebooks are more than we need. Hence, the Libretto. This computer uses a full-featured Windows 95 operating system and lets me install any software I want. I can use the same software on the Libretto as I use on my desktop computer. Before traveling, I assess what software and files I might want to work on and install them on the Libretto.

Make no mistake about it, even thought the Libretto uses Windows 95, it offers no competition to a more robust portable. It is powered by a Pentium 75MHz processor and has a hard drive that holds only 772MB. It comes standard with 16MB of RAM, expandable up to 32MB. The overall size of the computer is 8.3" x 4.5" x 1.3" and it weighs only 1.85lb. The Libretto is only slightly larger than a video cassette! To accomplish this, Toshiba has had to eliminate all of the non-essentials. The floppy drive attaches through the PC Card slot. The keyboard is large enough so you can make entries a good deal more easily than on a palmtop machine, but it is certainly not suitable for serious word processing. The pointing device is a convenient AccuPoint located in the hinged top of the machine. A button on the display side of the top accommodates the thumb and moves the pointer. Two buttons on the outside of the top fit the first and middle finger for clicking. I found this pointing system excellent and liked it a lot better than many of the other devices that come on small computers.

The active-matrix display measures only 6.1" diagonally and while it offers a clear image, I did have trouble reading it in brightly lit surroundings. There were no adjustments for brightness or contrast. While there are no ports on the back of the machine, a tiny port replicator comes with the unit. This attaches to the back of the Libretto and has serial, parallel, and video ports. A more elaborate enhanced port replicator ($179) is available and offers keyboard and mouse ports and additional PC Card

Palmtop systems are often too small for managing email or looking at files. On the other hand, the sub-notebooks are more than we need. Hence, the Libretto.

Control Multiple PCs With One Keyboard Mouse and Monitor!



EDIMAX'S CPU SWITCHES

- Save money on redundant peripherals
- Save precious space by eliminating extra keyboards, monitors & mice
- Control 2, 4 or 6 PCs
- Uses standard cables
- Supports AT or PS/2
- Supports VGA, SVGA & XVGA
- Control by push-button, keyboard, hot keys, or auto scan
- Truly plug-and-play
- Intelligent keyboard & mouse emulation to ensure successful PC boot up

CPU SWITCH

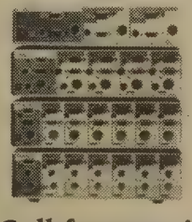
EDIMAX

1-800-652-6776

Tel: 408-496-1105

Fax: 408-980-1530

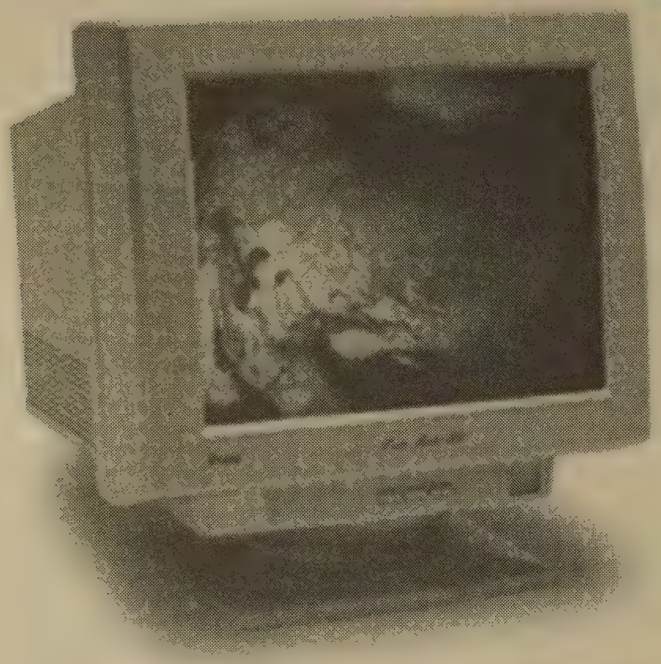
http://www.edimax.com



Ordering Information	Item #	Description	List(MSRP)
	CAS221	2-Port PS/2 & AT	$159
	CAS421	4-Port PS/2 & AT	$239
	CAS601	6-Port AT	$305
	CAS611	6-Port PS/2	$305
	6-Foot Cable Kit		$20
	10-Foot Cable Kit		$30

Call for special corporate and reseller discount program!

YOU'VE SEEN THE REST ...
NOW BUY THE BEST



PC MAGAZINE Best of 1997

VISIONMASTER™ PRO 17 . . $569
17" .25DP 1600x1200 @ 74Hz

When a monitor wins a presigious award like this, it's big news. But then, iiyama monitors have been making news for some time now. In fact, iiyama monitors continue to be among the most critically acclaimed in the industry.

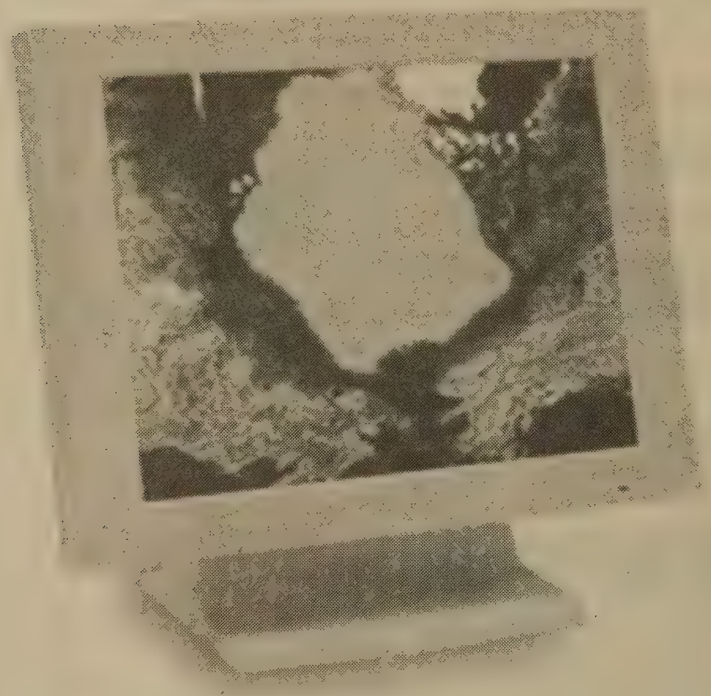
PC WORLD BEST BUY

CADALYST LABS HIGHLY RECOMMENDED 1998

VISIONMASTER™ 450 . . . . . $779
19" .22(H)DP 1600x1200 @ 80Hz

NEW 19" Award Winning Monitor, "A year ago, you couldn't dream of getting a monitor this good for this low a price.

PC WORLD BEST BUY



PROLITE 36 . . . . . $998
LCD 14.1" 1024x768 @ 72Hz

The ProLite series is the newest ultra-thin lightweight Liquid Crystal Displays.

MF-8515G .28DP 1280x1024 @ 64Hz . . . $248
MF-8617E .22HDP 1600x1200 @ 69Hz . . $488
R-817E .22HDP 1800x1440 @ 74Hz $599
MF-8721 .22HDP 1800x1440 @ 74Hz . . $1159
MT-9221 .28DP 1800x1440 @ 74Hz. . . . $1159

iiyama®

Available at:

1-800-594-7480

LAITRON

Berkeley	510-647-1777
Hayward	510-266-0606
Millbrae	415-652-0888
Pleasant Hill	510-798-7888
San Jose	408-321-9488

Central Computers

Santa Clara	408-248-5888
San Francisco	415-495-5888
Newark	510-793-5555

UMiracle Microsystems

Albany	510-526-2626
San Francisco	415-885-5050
Fremont	226-3666

HD Computer

Santa Clara	408-986-9898
San Francisco	415-434-8118
El Cerrito	510-528-0753

slots. If you attach either port replicator, you will be able to connect to a full size monitor making this machine a perfect vehicle for presentations. The Sound Blaster Pro compatible audio system complements the video capabilities.

The included lithium ion battery will operate the machine for between an hour-and-a-half and two hours under normal use. Fortunately, Toshiba offers an enhanced battery pack ($159) that offers twice the duration of the standard pack ($99).

In addition to serial and parallel ports, there is a serial infrared port and software to synchronize the Libretto with your everyday computer. The PC Card slot will take any of the standard devices, but there is only one slot on this machine. I tried a CD-ROM drive and it worked fine, but if you need two PC Card slots, you will have to switch back and forth. Toshiba offers a PC Card modem, but any of the PC Card modems will work through this interface, so you are not limited to their offering.

Toshiba includes a wide range of software with the machine and offers a one-year warranty. When this unit was introduced last summer, it carried a price twice its current $999 list. It is possible to spend nearly this much on a top of the line palmtop that has a color display and uses Microsoft's Windows CE operating system. While the palmtops have a different niche than this machine, I find this an appealing product that fills a definite need. For those who like the idea of the Libretto 50CT, but need a more powerful unit, Toshiba has introduced two more computers in this line with larger hard drives and faster processors. These Librettos cost as much as $2500. Unless I intend to do serious work when on the road, I will carry the Libretto C50.

Toshiba has a number of accessories for this small computer, including a handsome wallet-like carrying case ($49). ◆

Copyright © 1998 by Ed Kahn. All rights reserved.

The Libretto is only slightly larger than a video cassette! To accomplish this, Toshiba has had to eliminate all of the non-essentials.

Resources:

Libretto C50, $999
Toshiba America, Inc.
P.O. Box 19724
Irvine, CA 92623-9724
1-800-457-7777

ARESCOM
Easy, Low-Cost
Small Office / Home Office Solutions
ISDN BRI Router & ISDN Digital Modems

FREE[1] PC Interface Cable

[1]Receive a FREE parallel interface cable with every Flash 300 Plus[2] purchase. Call for more details. Limit one cable per product, while supplies last.

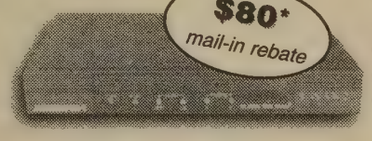
ISDN BRI
TA/Bridge/Router/Internet Gateway
APEX 1100

NEW

Key Features:
- **Remote Manager™**
- Dynamic IP (NAT) & Static IP
- Internet & LAN-to-LAN Bridging
- Multiple user profiles
- Data-Over-Voice
- Dial-in/Dial-out for client/server capabilities
- MLPPP, PAP & CHAP, Compression
- Dial/Bandwidth-on-Demand
- Windows® 95 and NT 4.0 GUI
- Auto SPID & switch type detection
- *Plus much, much more...*

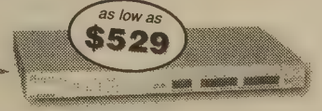
"If you have an Ethernet LAN and want to provide economical access to the Web and maintain good performance, the Apex 1100 dishes out data efficiently and affordably."
COMPUTER SHOPPER

ISDN External Modem
FLASH 300 Plus[2]



Key Features:
- Parallel & serial PC interfaces
- Full 128Kbps bandwidth
- Windows® 95 GUI
- Auto SPID & switch type detection
- Two Analog Ports
- *Plus many more features...*

10/100 Fast Ethernet Switch
SwitchLinker 210



Key Features:
- 560Mbps bandwidth, 3K MAC address, 1MB buffer
- Dual speed ports 1X & 2X with auto-negotiation
- Full or half duplex operation on all ports
- MII connector for connecting to external 100BaseFX MAU
- Auto-detects physical address ID
- Two dual speed 100BaseTX/10BaseT ports
- Eight 10BaseT ports

ISDN Internal Modem
FLASH 200

Key Features:
- Plug-n-Play installation
- Automatic SPID & switch type detection
- Windows® 95 GUI
- Microsoft® Compression (up to 512K)
- Two Analog Ports (optional)

"Top performance at a rock-bottom price!"
BYTE

"Arescom's internal Flash 200 is an easy-to-configure option in a complex field!"
HOMEPC

Special Reseller and ISP Promotional Programs available. Contact an Acount Manager for more detailed information.

(510) 445-3638
email: sales@arescom.com
www.arescom.com

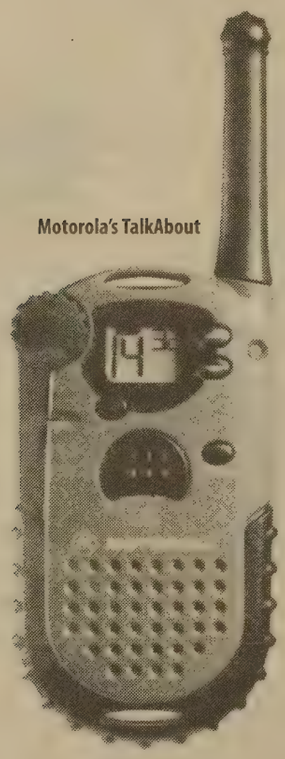
** Mail-in rebate applies only to products purchased through ARESCOM Value-Pack Program between March 17, 1998 thru May 16, 1998. To qualify for rebates, all products purchased must have a proof-of-purchase. All rebate requests must be postmarked and delivered to ARESCOM on or before June 16, 1998. Limit ten (10) rebates per product per customer. One-hundred fifty-dollar ($150) rebate applies to ARESCOM Apex 1100-1, Apex 1100-2, Apex 1100-3 models. Eighty-dollar ($80) rebate applies to ARESCOM Flash 300 Plus2 model. Forty-dollar ($40) rebate applies to ARESCOM Flash 200-1, Flash 200-2, Flash 200-3 models. This rebate is not to be combined with any other offer. No rebates will be paid for products returned for credit. For more information on ARESCOM Value-Pack Program and rebates, contact an ARESCOM Account Manager today!*

Out And About With A TalkAbout

Motorola's Rugged Walkie-Talkies For The '90s

By Douglas J. Nakakihara

The TalkAbout is perfect for people in the outdoors. Anywhere people might be in the same general vicinity,but not visible to each other.



Motorola's TalkAbout

We've all had them as kids—those nearly throw-away plastic walkie-talkies. How long did it take before we dropped one of them or bent off an antenna? "Not long" is my recollection. (In both cases, the second fully functioning one might as well have suffered the same fate.) Motorola has released an adult version of these two-way radios called a TalkAbout. Unlike its distant cousins, these are made of rugged high-impact plastic, similar to the compounds used to make motorcycle helmets. The TalkAbouts are even water- and dust-resistant.

These two-way radios use the recently created Family Radio Service band. The frequencies were reclassified by the FCC specifically for family and recreational use. No licensing is required.

The TalkAbout

There are three versions of this device: the TalkAbout ($100), the TalkAbout 101 ($140), and the TalkAbout Plus ($179). The later two models have back-lit displays. The TalkAbout Plus adds audio accessory compatibility and is the model I tested.

They are about 4.5" tall, 2.5" wide and about 1" thick. As such, they fit comfortably in the palm of your hand. The flexible antenna sticks out about 2.5" from the top and including batteries, the TalkAbout weighs a mere 7 oz. The thick, tire tread-like protective border around the bottom gives it a nice feel and surely helps things if you should accidentally drop it. It comes with a detachable belt clip. The three AA batteries provide up to 3 hours of talk time and 27 hours of standby.

Range

It has a talk range of up to two miles, if you happen to be in a flat open area. I tried the TalkAbout in a residential area with one of us inside a house and the other in a moving car. At about one-half mile I could still get crystal clear reception and even at a mile I was getting some reception, although it was intermittently a bit garbled.

Uses

The TalkAbout is perfect for people in the outdoors. Anywhere people might be in the same general vicinity, but not visible to each other. Activities like camping, fishing, skiing, bicycling, jogging come to mind. These would be great for use at the mall or an amusement park. Just think, people would be free to roam around as they please and stay "connected" to their friends or family.

The TalkAbouts are absolutely silent until someone in range transmits using the same channel and code you are set for. There are 14 available channels and each has 38 (interference eliminator) sub-channels. If you do the math, there are a total of 532 possible combinations. So you could have different people using different channels, preventing everyone from hearing all conversations. (Of course, no user is precluded from switching the channel and sub-channel, if they wish.)

The back-lit LCD display shows the channel and sub-channel numbers, as well as the battery level. There is a cool feature where if you hold the power button down for two seconds while the radio is off, the current channel settings is announced audibly. There is also a monitoring button which lets you monitor channel settings before you use them-just so you don't "step" on someone accidentally.

In The Field

I tested the TalkAbout at this year's NAB (National Association of Broadcasters) convention in Las Vegas. They worked very nicely on the show floor despite the huge presence of computers and other electronics equipment. On a return trek from the convention floor, I was going to meet some friends, who were staying at a different hotel, for dinner. What better opportunity to try out the TalkAbouts than this? I gave one handset to a them on their way to Caesar's Palace, while I made my way to Harrah's.

Granted these hotels are basically across from each other, but it is a pretty fair distance and we

UNITED MICROSYSTEMS, INC.

1175 Bordeaux Drive, Sunnyvale, CA 94089
Tel: (408) 747-8888 Fax: (408) 747-8887 Int'l Sales: (408) 747-8889
Toll Free Order Line: (800) 347-7888 Int'l Sales: (800) 347-7889
http://www.united-micro.com E-mail: unit@united-micro.com

WE SIMPLY BEAT ANY COMPETITOR'S PRICE AND SERVICE !

Leasing program, On site service available,30 DAYS FREE DEMO SYSTEM AVAILABLE!

PENTIUM II STATION

- INTEL Made Pentium II CPU & MB
- 64 MB RAM
- 1.44 FLOPPY DRIVE
- 3.2G MB HARD DISK
- PCI SVGA Card w/ 1MB
- 14" FLICKER-FREE SCREEN
- NON-INTERLACED MONITOR
- 101 Keyboard & Mouse
- Medi Tower ATX Case

FREE win95 w/MANUAL and CD

Upgrade option available

Pentium II 400 MHZ $ 1599
Pentium II 350 MHz $ 1399
Pentium II 300 MHZ $ 1099
Pentium II 233 MHZ $ 899

INTEL PENTIUM MULTIMEDIA

- Pentium CPU & MB
- 16 MB RAM
- 1.44 Floppy Disk
- 2.0 GB IDE Hard Drive
- 14" Flick-free NI Monitor
- PCI Video w/ 1MB.
- 101 Keyboard & Mouse
- Mini Tower case
- 16X Speed CD- Rom
- 16 bits Stero Sound
- 60W Speaker
- FREE win95 w/ Manual & CD

Upgrade option available !

CYRIX M2/233 MMX $ 749
CYRIX M2/200 MMX $ 729
AMD k6 233MMX MHZ $ 749
AMD K6/200MMX MHZ $ 729
PENTIUM 233 MMX $ 779
PENTIUM 200 MMX.$ 749

INTERNET MMX SYSTEM

- Intel/Cyrix /AMD CPU & MB
- 16 MB RAM
- 1.44 MB FLOPPY DRIVE
- 14" FLICKER-FREE
- NON-INTERLACED MONITOR
- 2.0 GB HARD DRIVE
- 1MB PCI SVGA CARD
- 101 ENHANCED KEYBOARD
- MOUSE & 33.6 Fax Modem
- MINI-TOWER CASE
- FREE win95 w/ manual & CD

Upgrade option available !

Cyrix M2/233...$659
Cyrix m2/200...$629
AMD K6/200....$649
AMD K6/233....$669
Intel 233mmx..$679
Intel 200mmx ..$659

BEST VALUE

ALL SYSTEMS COME WITH 72 HOURS BURN IN TEST

Motherboard: MB+CPU	Basic System (see Bottom Detail)	Basic System+ 2.0GB HDD 32MB SVGA CARD (3.2GB + 39)	Basic System + 4.3GBMB HDD 64MB SVGA CARD (6.4GB + 69)
Dual Pentium. II-400 (2 C [illegible]	399	1199	1399	1599	1699
Intel Seattle P. II 350 (PII400 + $199)	239	849	1049	1249	1349
Intel Atlanta P. II 233 (PII300 + $159)	149	349	549	749	949
Asus P2B98 P.II350(PII400 +$199)	189	799	999	1199	1299
Asus P2L97 P.II233(PII300 +$159)	143	349	549	749	849
Intel Anchorage 200MMX (233MMX+$39)	117	217	419	619	769
Asus SP97V,P5-200MMX(233MMX+$39)	76	179	299	499	659
Asus SP97V,P5-133 (166MMX+$29)	76	159	259	459	609
Asus TxP4, P5-200mmx(233mmx+$39)	99	224	324	524	675
P5-200MMX Intel Triton TX (233MMX+$39)	69	169	293	493	649
P5-133 Intel Triton VX (166MMX+$29)	49	139	245	445	599
486 Dx4/100 VLB & PCI	53	89	189	389	539

BASIC SYSTEM : (ASSEMBLED IN USA) Motherboard & CPU, Mini-Tower Case w/ power supply, 1.44MB Floppy Disk, 104 keys win95 Enhanced keyboard, IDE/IO w/ 2s/1p/1g ports, system Installed and tested.

CPU & MEMORY UPGRADE

CPU/AMD/Intel/Cyrix:

Pent MMX. 200/166....LOWEST
AMD/CYRIX 200/233...LOWEST
Pentium II 233/266.....LOWEST
Pentium II 300/333.....LOWEST

SIMM/DIMM:(Name Brand Only)

EDO 4/8 MB 72 PIN.....9/15
EDO16/32MB 72 PIN....29/55
SDRAM 16/32MB 27/49
SDRAM 64/128MB.....99/199

DUAL PENTIUM II/400 NT SERVER.

$3299

Mirroring
Raid 5

SPECIAL : Pentium Motherboard & CPU
W/ 512 K Cache on board
w/ cyrix 200 mmx + CPU $ 138

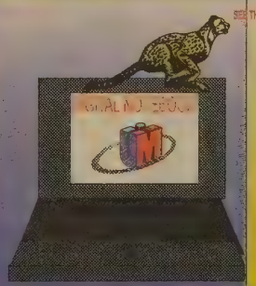
A lot more items on sale !

FAX/MODEM

Phobe 33.6 Fax Modem (int) /voice 39/43
Zoltrix 33.6 Fax Modem (ext)/voice.....39/43
U.S. Robotics 56K(int.)/Voice V.90.....119/135
U.S. Robotics 56K(ext.)/Voice V.90.....169/179
U.S.Robotics 33.6 (int)/voice 67/83
U.S Robotics 33.6 (ext)/voice 129/147
PCMCIA 33.6/56K Fax/Modem 57/89
A lot more items. Please call for best !

MULTIMEDIA

Toshiba 32X IDE CD-ROM $71
Mitsumi 16X IDE CD-ROM.....55
Toshiba/Teac SCSI 32X CD-ROM 93
Ess 3D sound(SB16 Compat.).....17
Creative Lab.SB 16 /Awe 64 .....33/63
Yamaha M7/M15 Speaker.....35/58
Stero Speaker 60/180W 10/29



SEE THE DIFFERENCE !

DIGITAL "HINOTE" !!!

. Intel 166 MMX	. Intel 133 MHZ
.3.2G Removable Hard Disk.	.1.2G Hard Disk.
.14.1 " Active Matrix XGA LCD.	. LCD.
.32 MB EDO Memory	.16 MB EDO Memory.
.512k L2 Cache.	.Nimh battery.
.Integrated 16 bit stero audio.	.1.44 Floppy Disk.
.Smart Lithium ion battery.	.Touch Pad.
.24X Removable CD ROM.	.6.8 Lb.
.1.44 Removable Floppy Disk.	.Dim. 11.8 " X 8.9" X 1.9"
.Touch Pad.	.Window 95 installed.
. 56k Fax modem.	
.Window 95 installed.	
.Super Light, about 5.2 lbs.	
$3599.00	$1699.00

DELUXE CASES

Deluxe Mini Tower w/ 230W PS 22
Deluxe Midmid tower w/230W PS 33
Deluxe Full tower w/230 w PS.....47
Desktop case w/ 230w PS 34
Power Supply 230 W. AT/ATX.....19/39
ATX mid/full tower w/ PS.....55/74

KEYBOARDS/MICE

Mitsumi 104 Enhanced Keyboard(win95).....10
Keytronic 104 win95 Enhanced(win95).....15
M.S. Natural keyboard(w/ Sys. only).....43
Microsoft compatinle serial mouse 5
Microsoft mouse (w/system only) serial/ps2...21/22
Logitec mouseman serial/Trackman.....19/49
Mitsumi PS2 mouse.....9

FLOPPY & HARD DRIVES

FD 1.44MB High Density.....19
W.D. IDE Hard Disk 2.0G/2.5G.....127/133
W.D. IDE Hard Disk 3.2G/4.3G.....147/177
W.D.IDE Hard Disk 5.0G/6.4G.....199/229
SCSI Hard Disk 1.0GB/2.0GB 99/199
SCSI Hard Disk 4.3GB Ultra Wide.....295
Zip Drive 100 MB(Internal/IDE) 79
Zip Drive 100 MB(extern/SCSI/Parallell) ..129

VIDEO CARDS

U.S.A. ISA SVGA 1MB.....27
U.S.A.Circus Logic PCI 1MB/2MB.....21/31
U.S.A. Trident PCI 1MB/2MB 21/31
Asus AGP 4MB 119
Diamond 3D 2MB/4MB Dram.....55/77
Diamond Stealth II 4MB/8MB SGRAM.....95/109
Diamond fire GL 8MB,PCI/AGP.....143/161
ATI 3D Expression + 2MB/4MB 61/77
ATI Expert work/play, 4MB/8MB.....151/173
Matrox Mystique 220 2MB/4MB..... 85/95
Matrox Millium II 4MB/8MB(pci/agp)..... 127/169

MONITORS

MAG 15(DJ530)/17(DJ700) 235/429
RELISYS 14"(3+)/15"/17".....129/169/309
Acer 14"/15" 145/189
IMPRESSION 14"/15"/17" 135/174/319
Sony 15ES/17/20.....285/535/1137
Nanao17"/20" 653/1519
Nokia 15"/17"/21".....315/439/1359
Viewsonic 15"/17"/21"(P815).....225/411/1159
NEC E500(15")/A700/M700..... 327/429/549

NETWORK/NOVELL 4.1

Intel Etherexpress 100 ISA/PCI.....47/49
3Com ISA TP/Combo(3C509).....42/55
3Com PCI 10/100 (3C905) 58
NE 2000 Combo network card ISA/PCI 16/25

IDE SCSI I/O CARDS

Adaptec 3940 UW Dual Channel.....379
Adaptec 2940/UW SCSI Card 127/147
Adaptec 3985 Raid Controller .....Call
ISA IDE w/ 2S/1P/1G 12
DPT Raid Controller .....Call

TAPE/SCANNER/FAN

Colorado T3000/T4000 .....153/331
Ball Bearing Cooling Fan Pent./Pent. II.....,9/19
Scanner Flatbed(parallel Port) 89

TERMS AND CONDITIONS

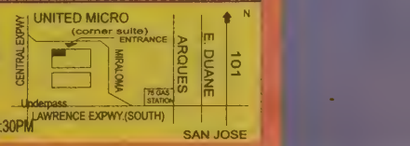
1 One year parts warranty on systems purchase.
2 Prices and company policy subject to change w/o notice.
3 Not responsible for typographic errors.
4 Return shipping must be insured, prepaid and bearing a RMA# on the shipping label, Buyer must pay his/her own postage for RMA.
5 Shipping, insurance and COD charges are extra and non-refundable.
6 List price reflect cash discount and limit to the available stock only.
* See store for detail, Limit to cash discount price and stock availability. United microsystems reserves the right to make any changes without notice.

UNITED MICRO

One Company, Infinite Solutions !!

CALL FOR THE LOWEST PRICES ON OTHER ITEMS NOT LISTED

BUS. HOURS:
MON-SAT: 8:30AM-5:30PM



were inside different buildings. The transmission was crystal clear, with the single exception of inside the casinos, where reception was sporadic. Once we exited the casinos and returned the hotel areas, we were able to talk normally again.

If you have ever been to Las Vegas, you know that arranging a meeting can often be difficult. For one such meeting, shortly after I arrived at the designated meeting place on time my friend's voice popped up on the TalkAbout. They were running late so I just went back into the casino to kill another ten minutes. When I returned they still weren't there so I called them and they told me they were coming right down. This whole incident really proved to me just how valuable the TalkAbout could be in the right situation.

Accessorize

For the fashion conscious, TalkAbouts are available in camouflage, khaki green, dark pewter, cobalt blue, and bright yellow. There are tons of optional accessories too, like external microphones, ear pieces, and headsets, as well as a 12-volt car adapter. Several specially designed carrying cases can also be purchased, including a waterproof bag for talking the TalkAbout river rafting or boating.

Since you might not want others to hear your conversations, I think the ear pieces might be recommended options. Besides, having "Hey, honey where the heck are you! We were suppose to meet back at the food court 15 minutes ago!" blare out while you are perusing the latest computing magazine in the nice (previously) quiet bookstore, might be a little embarrassing.

iDEN

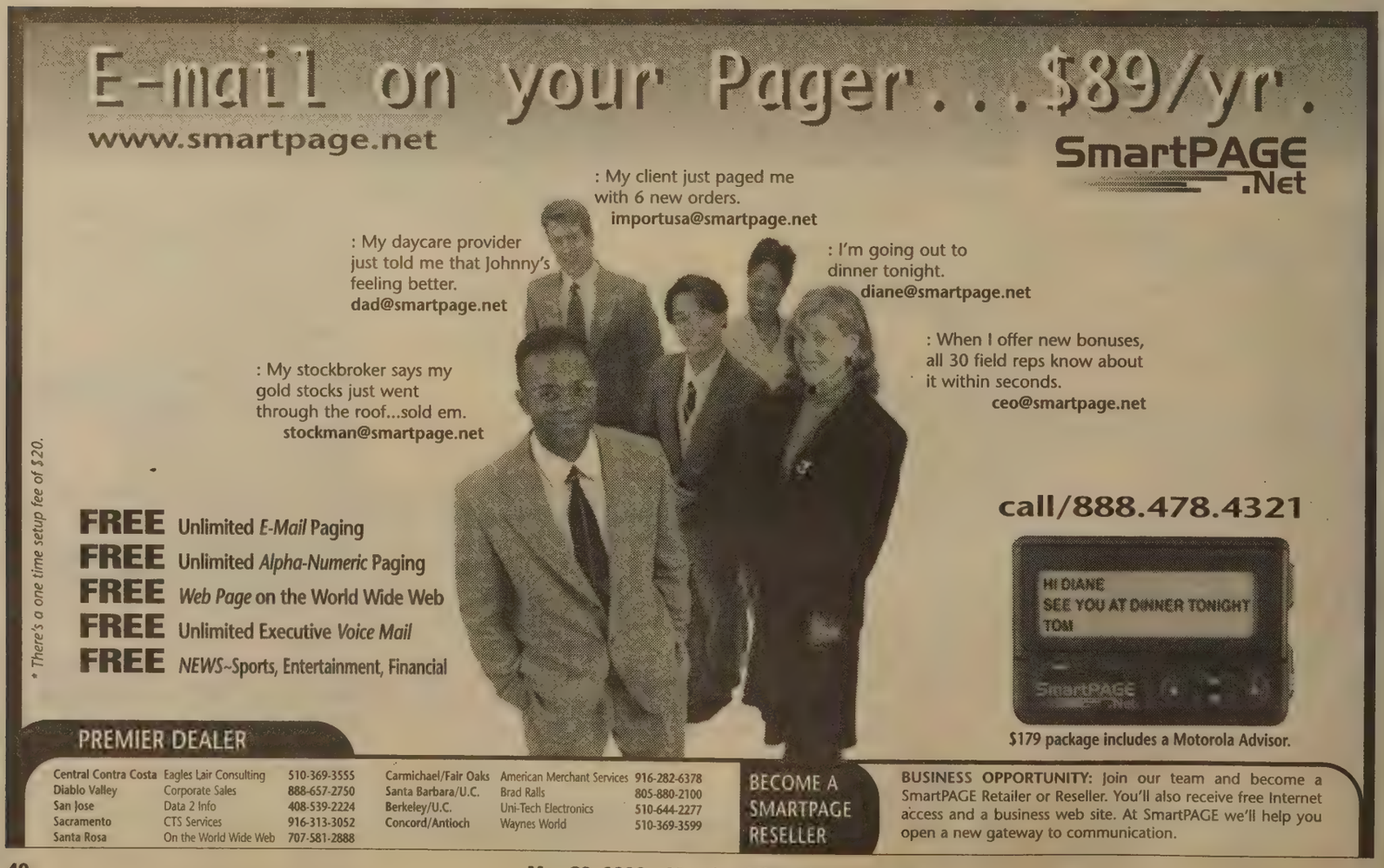
Motorola has also begun offering a series of new devices based on iDEN technology. This technology represents the convergence of several communication needs: Two-way radio, mobile phone, alphanumeric paging, and data communication (i.e., modem and faxing)—all in one unit! Although iDEN is a digital technology, it uses a single analog transmission channel. iDEN uses a combination of several proprietary technologies to maximize bandwidth efficiency.

Two-Way Communications

Two-way communication can be set up as private or groups. "Talk" groups are essentially conference calls, but you don't have the laborious setup associated with traditional telephone service. Up to 30 different groups can be set up. Normal phone communications can include features like voice mail, call forwarding, caller ID, hold, and auto-answer.

The two-way communication feature lets you speak to a single person or a hundred. The feature works like a walkie talkie, you simply push a button to speak and release it to listen. You can

NiCad cells are apparently designed to last 2,000 to 3,000 charges; however, they can develop the "memory" effect in as little as 150 charges and most are replaced after only 300 charges!


E-mail on your Pager...$89/yr.
www.smartpage.net
SmartPAGE .Net
: My client just paged me with 6 new orders.
importusa@smartpage.net
: My daycare provider just told me that Johnny's feeling better.
dad@smartpage.net
: I'm going out to dinner tonight.
diane@smartpage.net
: When I offer new bonuses, all 30 field reps know about it within seconds.
ceo@smartpage.net
: My stockbroker says my gold stocks just went through the roof...sold em.
stockman@smartpage.net
* There's a one time setup fee of $20.
FREE Unlimited E-Mail Paging
FREE Unlimited Alpha-Numeric Paging
FREE Web Page on the World Wide Web
FREE Unlimited Executive Voice Mail
FREE NEWS~Sports, Entertainment, Financial
call/888.478.4321
HI DIANE
SEE YOU AT DINNER TONIGHT
TOM
$179 package includes a Motorola Advisor.
PREMIER DEALER
Central Contra Costa Eagles Lair Consulting 510-369-3555
Diablo Valley Corporate Sales 888-657-2750
San Jose Data 2 Info 408-539-2224
Sacramento CTS Services 916-313-3052
Santa Rosa On the World Wide Web 707-581-2888
Carmichael/Fair Oaks American Merchant Services 916-282-6378
Santa Barbara/U.C. Brad Ralls 805-880-2100
Berkeley/U.C. Uni-Tech Electronics 510-644-2277
Concord/Antioch Waynes World 510-369-3599
BECOME A SMARTPAGE RESELLER
BUSINESS OPPORTUNITY: Join our team and become a SmartPAGE Retailer or Reseller. You'll also receive free Internet access and a business web site. At SmartPAGE we'll help you open a new gateway to communication.

Proven Technology since 1990

We Are Price Competitive with Complete After-Service Support

Proven Network

Pre-Configured 1 Server & 4 Workstations

Includes:

1 Proven Server
* Pentium® 233MHz Processor (FIC MB, 512K Cache)
* 32MB EDO Memory
* 3.2GB U-IDE Drive
* 1.44 FD, 104KB
* Mid-Tower Case
* Video Card (PCI 1-MB)
* 14" Monitor

4 Proven Workstations
* Pentium® 200MHz MMX (FIC MB, 512K Cache)
* 16MB EDO Memory
* 3.2GB U-IDE Drive
* 1.44 FD
* 104 Keyboard
* MS-Mouse
* Mini-Tower Case
* Video Card (PCI 1-MB)
* 14" Monitor
* Windows 95

Networking Accessories
* Ethernet hub - 5 ports
* 5 Ethernet Cards (NE2000)
* 5-10-Base-T Patch Cables (6' Long)

Novell Certified NetWare Engineer

Novell NetWare 4.11 5-user For Small Business $3862

Microsoft NT Server 5-user License, Mouse & CD-ROM for Server . . $3916

PROVEN FULLY FUNCTIONAL NOVELL SERVER 5-user $1007

PROVEN FULLY FUNCTIONAL NT SERVER 5-user $1062

(Server hardware configuration is the same as the Proven server above)

Additional Networking Products

Networking Products:

Intel 10/100 TP	$LOW
3Com Etherlink 3C905 10/100TX	$LOW
NE2000 Comp. Ethernet NIC	$LOW
Ethernet Hub:	
5-port Ethernet Hub-Lynksys (1 BNC, 1 AUI)	$45
8-port Ethernet Hub-Lynksys (1 BNC)	$65
20-port Ethernet Hub-Lynksys	$149
24-port 10/100 Auto-sensing Ethernet Hub-Lynksys	$679
Smart UPS 1000Net	$LOW
Smart UPS 700Net	$LOW

ISDN:

3Com Impact IQ	$LOW
Motorola Bit-Surfer Pro	$LOW
US Robotics Courier I-Modem	$LOW

Router:

Ascend Pipeline 50 U-interface w/ NT-1	$CALL
Cisco 1601	$CALL
Cisco 1602	$CALL
Cisco 2524	$CALL
HP JetDirect Enet 10BaseT	$LOW
Intel Print Server NetPort Express	$GREAT

Backup:

ArcServe NT or Novell	$CALL
Backup Exec NT or Novell	$CALL
Legato Backup Software	$CALL
HP 81-8GB DAT SCSI	$CALL
HP 5000I-4GB DAT SCSI	$CALL
Seagate 24GB DAT SCSI	$CALL
Digital DLT 4500 (100GB/200GB)	$CALL
Microtest 12X/7Bay/7Dr CD-ROM Tower	$CALL

FREE $250 value Digital Scanner for first-time corporate buyer with $6,995.00 or more purchase.

Authorized Reseller

hp IBM Microsoft Windows NT ASCEND 3Com Cisco Systems

FREE On-Site Network Consultations!

Limited time offer. Must mention this coupon when you set appointment. Expires 6-1-98

$60/mo. Internet Solution

For Your Entire Company

* Provides unlimited Internet e-mail messages
* Individual e-mail addresses for each employee
* Provides Internet browsing
* Improves communication internally & externally
* Supports 5 to 250 workstations

(One-time cost and Internet usage fee may apply)

CORPORATE PROVEN SYSTEM-SERVICES

Proven One-Year On-Site or Phone Support Contract Includes:

* Upgrade & Installation Hardware/Software
* Maintenance & Support: PC, LAN, Server, Windows, DOS
* Relocate Computer & Equipment
* Troubleshoot Computer & Application Errors
* Backup / Restore
* LAN / WAN Networking
* E-Mail Setup
* Internet Connectivities
* Systems / Server Administration

ONLY $35/MONTH

(Some restrictions apply, part # EWT-001-S)

We Also Carry These Very Competitively Priced Notebooks

Acer HITACHI hp HEWLETT PACKARD IBM FUJITSU TOSHIBA

Call For Latest Prices!

408-946-3838

Fax: 408-946-2900

491 Sinclair Frontage Rd.

Milpitas, CA 95035

Terms: *Prices/availability are subject to change • No surcharge for Visa/Mastercard • Company terms on credit approval • Not responsible for typos

PROVEN TECHNOLOGY 408-946-3838 CORPORATE NETWORKING CONSULTANTS

Trade In - Trade Up!

FREE 3 Hr. Win. Class by Computerific w/Ea. System Purchased!

OPEN 7 DAYS A WEEK

BUY SELL TRADE

COMPUTERS
PRINTERS
MONITORS
MEMORY
REPAIRS
UPGRADES

Computer Renaissance has added another store in Pleasant Hill to our existing stores in Colma, San Jose & Fremont with even MORE used computer equipment. We buy, sell & trade computers: 486, Pentiums, Macs & Notebooks. We recondition computer equipment to work like new, with a warranty!

- ✔ Fast Turnaround on Service & Repairs
- ✔ Internet-Ready Complete Systems Including Monitor Starting at Under $500
- ✔ Trade In Your Old Computer Equipment for Newer Equipment
- ✔ Extended Warranties Available

Visit our showrooms and try one out.
This isn't just a neat idea - it's a neat store!

Computer RENAISSANCE

Now In PLEASANT HILL
959 Contra Costa Blvd.
Across from Sun Valley Mall
510-680-1224

SOUTH BAY
5203 Prospect Rd.
San Jose (Westgate West Center)
Between Lawrence Exp./Saratoga
(408) 873-8070

COLMA
280 Metro Center
Colma, CA 94014
(650) 758-1181

FREMONT PLAZA
3750 Mowry Ave.
(510) 744-1600

We buy, sell & trade used & new computer equipment.

FINANCING AVAILABLE

Does Your Company Have Technical Job Openings?

Target Qualified Professionals with MicroTimes.

Our readership sets us apart!

- **68%** *hold bachelor's degrees or higher*
- **50%** *have over 10-years computer experience*
- **48%** *are managers, engineers, or programmers*

MICROTIMES CLASSIFIEDS

For info call Larry Nusbaum
Classified Account Executive
(510) 768-1200 • E-mail: larry.nusbaum@microtimes.com

use it in speaker mode or use the ear piece for private communications. Obviously, others will also have to have iDEN handsets.

If you need to urgently speak to someone privately you can use the two-way feature. And if they are busy or you don't want to disturb them, you can push a special button on your phone. The recipient's phone will "chirp" and they will get an on-screen notification.

Pager messages can be up to 140 characters in length and up to 16 messages can be stored. Also featured is one-touch call back.

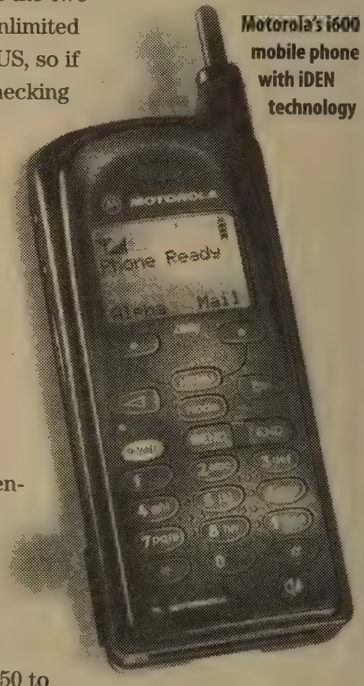
No Modem Required

Notebook PC users can hook directly up to the iDEN device because modems are integrated into the iDEN network. A top speed of only 9600bps puts it a little on the slow side, but when you consider the convenience it's probably a small price to pay.

Getting Service

iDEN services are provided by individual service providers, like Avantel and Nextel Communications, Inc. iDEN networks are currently operational in Argentina, Canada, Colombia, Israel, Japan, Korea, Singapore, and the United States. In addition, iDEN systems are being built in Brazil, China, Mexico, and the Philippines. Motorola has shipped over two million iDEN handsets since the technology was first introduced in 1994. (Check Motorola's Web site for more information.)

Service cost will vary from provider to provider. However, Nextel's cheapest plan is only $45 for 200 minutes. This price includes basic voice mail, unlimited numeric pages, and 25 text pages. Additional minutes are 29 cents and long distance calls are billed at a flat rate of 15 cents per minute. There are no roaming charges or charges for landline connections. Enhanced voice mail and Caller ID are extra. For a mere $24 more, you get another 300 minutes! If you want to add the two-way features, it's about $40 extra for unlimited use. (Nextel seems to cover a lot of the US, so if you are interested, you might start by checking out their Web site.)



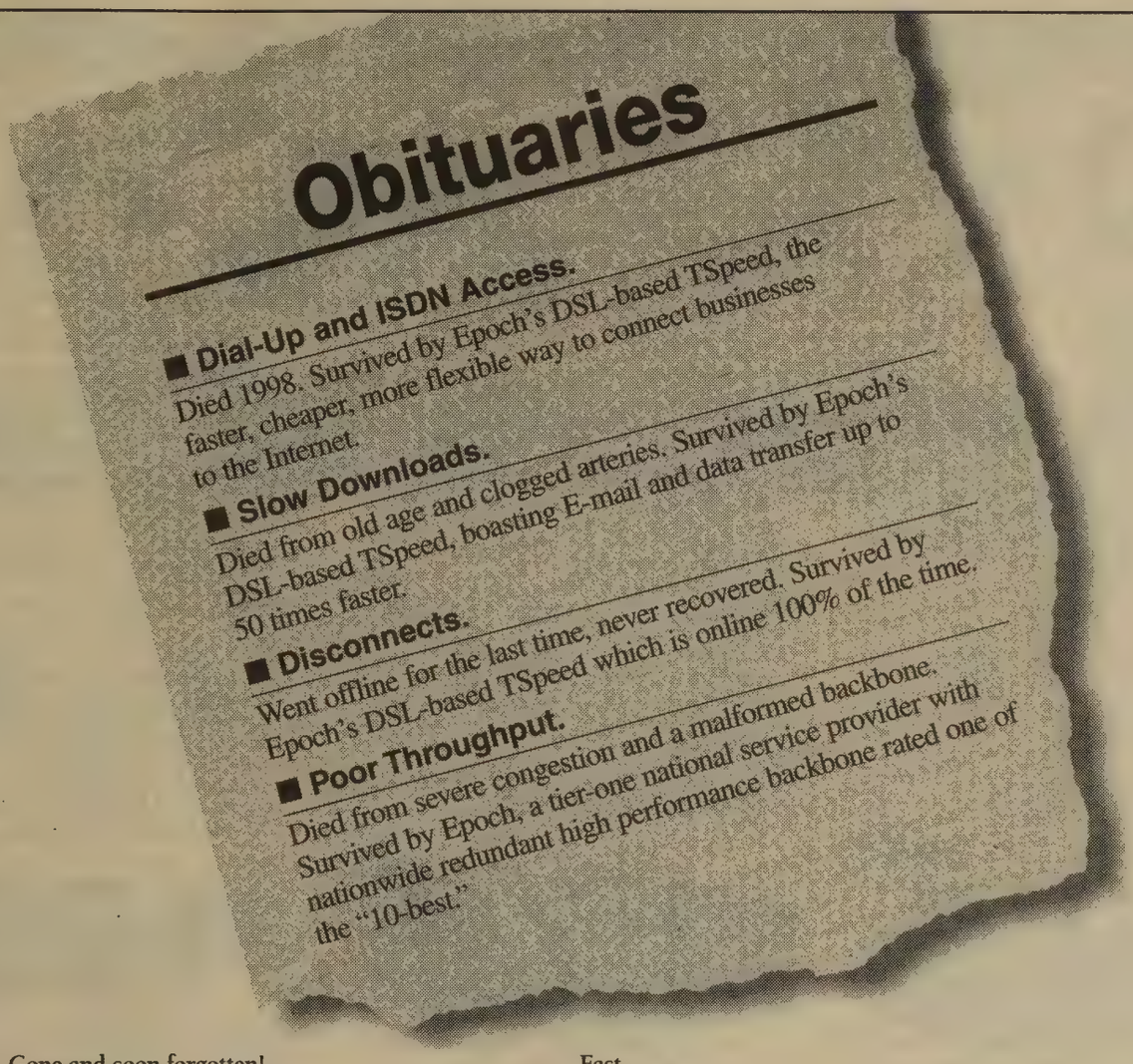
Motorola's i600 mobile phone with iDEN technology

As you can see, if you are already carrying a pager and cell phone, iDEN might make a lot of sense. This makes a lot of sense on a more global scale for company wide deployment. Personally, I'm seriously thinking about switching over when my cell contract expires.

The i600

The Motorola i600 handset is a third generation iDEN communications device. It weighs in at only 6.9 oz. with ultra slim battery and measures 5.3" x 2.3" x .7." A variety of NiCad, NiMH, and lithium ion batteries are available with talk times ranging from 150 to 360 minutes and 32 to 80 hours of standby time. The large back-lit LCD screen sports four 12-character lines, plus various operational menu and icons. Most of the features are what you would expect on a digital phone, but this one also supports two separate lines. (Only $10 extra with Nextel!) Note that this unit does not support data communication.

continued on page 46


Obituaries
■ Dial-Up and ISDN Access.
Died 1998. Survived by Epoch's DSL-based TSpeed, the faster, cheaper, more flexible way to connect businesses to the Internet.
■ Slow Downloads.
Died from old age and clogged arteries. Survived by Epoch's DSL-based TSpeed, boasting E-mail and data transfer up to 50 times faster.
■ Disconnects.
Went offline for the last time, never recovered. Survived by Epoch's DSL-based TSpeed which is online 100% of the time.
■ Poor Throughput.
Died from severe congestion and a malformed backbone. Survived by Epoch, a tier-one national service provider with nationwide redundant high performance backbone rated one of the "10-best."

Poor Dial-up. Gone and soon forgotten!
After all, who wants to remember the frustration of busy signals...sudden disconnects...and sluggish data transfer? It's no way for your business to use the Internet.

TSpeed™ - The Best DSL Solution Today.
Epoch's DSL-based TSpeed was born to resolve your frustration and replace your current dial-up or ISDN service with a high-speed, reliable, "always-on" Internet connection. It delivers economical, easy-to-use access at speeds up to 50 times faster.

Affordable.
You can connect for as little as $35 "per seat" for your Internet access. You'll also have to pay for special digital telephone circuit fees that are about equal to the cost of three regular analog modem lines, or one ISDN line once you consider usage. With TSpeed, you get unlimited Internet use, browser and E-mail software, 24-hour free technical support, up-time guarantees, your very own company E-mail account (**you@company.com**), and more.

Fast.
TSpeed lets you connect to the Internet at speeds from 144 Kbps to 1,500 Kbps. You select how fast you want to connect. Call today and an Epoch representative will help you pick what's best for your needs.

Limited Time Offer! Save $1,380.
If you act now, you can take advantage of Epoch's introductory offer, a complete professional Internet package that includes:

- Free onsite installation ($395 value)
- Free set-up charges ($500 waived)
- Free Domain Name Registration ($250 value)
- Free Website activation ($200 waived)
- Free E-mail box ($35 annual value)
- Free E-mail and Internet browser software
- Router equipment for only $27/mo.
- Free around-the-clock technical support

So say your good-byes to dial-up and ISDN and welcome a new era of business Internet service.

EPOCH℠
INTERNET

CONNECTING THE WORLD. ONE BUSINESS AT A TIME.™

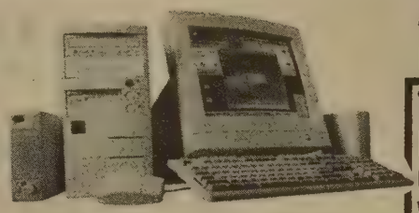
1-888-77-EPOCH (1-888-773-7624) • www.eni.net/death2dialup

"TOP CHOICE, BEST VALUE" SUPER PENTIUM™ II SYSTEMS...

IQ INFOQUEST COMPUTER

LOOK!

$AVE 3% with Cash Purchase on Systems



IQ INFOQUEST
4500 El Camino Real
Los Altos, CA 94022
Tel: (650) 917-9180
Fax:(650) 917-9183
Hours: Mon-Fri 9-6, Sat 12-5
WebSite: WWW.IQINFOQUEST.COM

IQ LEVEL-6 PENTIUM® II

EXPLORER

- Intel PENTIUM® 200MHz MMX Processor
- Intel AN430TX Mainboard w/512K Cache
- 32Mb SDRAM 10ns (168pins 1x32M)
- 1.44Mb Floppy Drive
- 3.2Gb Ultra EIDE Hard Drive
- Built In Ultra IDE (DMA/33) & Hi-Speed I/O
- ATX1 SuperMid Tower Case, 230Watts P.S
- Decaview G380 (17" 1280x1024@66Hz.28dpi)
- Diamond 3D 2000 Pro 2Mb EDORAM
- Toshiba 24X EIDE CD-ROM Drive
- Yamaha 3D Sound Card
- Labtec Stereo Speakers
- Keytronic Win95 Keyboard
- Logitech 1st Mouse & Mouse Pad
- CD: Microsoft Windows 95

Super Buy

$990

Pentium 233Mhz MMX $1020

IQ LEVEL-6 Ultra Wide SCSI

RANGER

- AMD K6-233 MMX Processor
- Jbond 430TX Mainboard w/512K Cache
- 64Mb SDRAM 10ns (168pins 1x64M)
- 1.44Mb Floppy Drive
- 4.3Gb Ultra EIDE Hard Drive
- Built-In Ultra IDE (DMA/33) & Hi-Speed I/O
- ATX1 SuperMid Tower Case, 230Watts P.S.
- Decaview G380 (17" 1280x1024@66Hz.28dpi)
- Diamond 3D 2000 Pro 4Mb EDORAM
- Toshiba 24X EIDE CD-ROM Drive
- Yamaha Chipset Sound Card
- Labtec Stereo Speakers
- Keytronic Win95 Keyboard
- Logitech 1st Mouse Plus (Internet Mouse)
- CD: Microsoft Windows 95

$1035

AMD K6-266 MMX $1120
AMD K6-300 MMX $1215

IQ LEVEL-6 Dual STATION

TROOPER

- Intel PENTIUM II 233Mhz Processor w/MMX Technology (CPU L2-512K Cache)
- Intel AL440LX/S Pentium II Mainboard
- 64Mb SDRAM 10ns (168pins 2x32M)
- 1.44Mb Floppy Drive
- 4.3Gb Ultra EIDE Hard Drive
- Built In Ultra IDE (DMA/33) & Hi-Speed I/O
- ATX1 SuperMid Tower Case, 230Watts P.S.
- Decaview G387 (17" 1600x1280@75Hz .25dpi)
- Diamond 3D 4000 4Mb SGRAM (AGP)
- Toshiba 32X EIDE CD-ROM Drive
- Built-In Yamaha Sound Card
- Labtec Stereo Speakers
- Keytronic Win95 Keyboard
- Logitech 1st Mouse Plus (Internet Mouse)
- CD: Microsoft Windows 95

Super Buy

$1295

Pentium II 266Mhz $1345
Pentium II 300Mhz $1480
Pentium II 333Mhz $1625

IQ LEVEL-6 PENTIUM® II

PATHFINDER

- Intel PENTIUM II 233Mhz Processor w/MMX Technology (CPU L2-512K Cache)
- Intel Seattle 440BX/S Pentium II Mainboard
- 64Mb SDRAM 100Mhz (168pins 1x64M)
- 1.44Mb Floppy Drive
- 6.4Gb Ultra EIDE Hard Drive
- Built-In Ultra IDE (DMA/33) & Hi-Speed I/O
- ATX1 SuperMid Tower Case, 250Watts 2.01 P.S.
- Decaview G387 (17" 1600x1280@75Hz .25dpi)
- Matrox Produtiva G100 8MB SGRAM (AGP)
- Toshiba 32X EIDE CD-ROM Drive
- Built-In Crystal Sound Card (ISA)
- Yamaha M7 Speakers
- Keytronic Win95 Keyboard
- IOMEGA 100Mb Zip Drive (Internal IDE)
- Logitech 1st Mouse Plus (Internet Mouse)
- CD: Microsoft Windows 95

$1545

Pentium II 266Mhz $1595
Pentium II 300Mhz $1730
Pentium II 333Mhz $1875
Pentium II 350Mhz $1985
Pentium II 400Mhz $2215

IQ LEVEL-6 Ultra Wide SCSI

DISCOVER

- Intel PENTIUM II 233Mhz Processor w/MMX Technology (CPU L2-512K Cache)
- SuperMicro P6SBS Pentium II Mainboard
- 64Mb SDRAM 100Mhz (168pins 1x64M)
- 1.44Mb Floppy Drive
- 4.3Gb Ultra Wide SCSI Hard Drive
- Built-In Adaptec 7880 Ultra Wide SCSI
- Built-In Ultra IDE (DMA/33) & Hi-Speed I/O
- ATX1 SuperMid Tower Case, 250Watts 2.01 P.S.
- Decaview G387 (17" 1600x1280@75Hz .25dpi)
- Matrox Productiva G100 8Mb SGRAM (AGP)
- NEC 16X SCSI CD-ROM Drive
- Sound Blaster 16 PnP Sound Card
- Yamaha M7 Speakers
- Keytronic Win95 Keyboard
- Logitech 1st Mouse Plus (Internet Mouse)
- CD: Microsoft Windows 95

Value Buy!

$1665

Pentium II 266Mhz $1715
Pentium II 300Mhz $1850
Pentium II 333Mhz $1995
Pentium II 350Mhz $2105
Pentium II 400Mhz $2335

IQ LEVEL-6 Dual STATION

LINUX & WIN95

- Intel PENTIUM II 233Mhz Processor w/MMX Technology (CPU L2-512K Cache)
- Jbond 440BX Chipset Pentum II Mainboard
- 64Mb SDRAM 10ns (168pins 2x32M)
- 1.44Mb Floppy Drive
- 5.1Gb Ultra EIDE Hard Drive
- Built-In Ultra IDE (DMA/33) & Hi-Speed I/O
- ATX2 Mid Tower Case, 250Watts Power Supply
- Decaview G387 (17" 1600x1280@75Hz .25dpi)
- Diamond 3D 2000 Pro 4Mb EDORAM
- Toshiba 32X EIDE CD-ROM Drive
- Built-In Yamaha Sound Card
- Yamaha M7 Speakers
- Keytronic Win95 Keyboard
- Logitech Mouseman & Mouse Pad
- CD: LINUX & MS Windows 95

$1450

Linux is the UNIX operating system capable of running PC along w/MS-DOS & Windows.

- Built-in communication & networking TCP/IP, UUCP, NFS, Telenet, FTP, E-Mail, Slip,PPP.
- Graphical Interface/Tool: X11,XView, Tel, TK, Motiff.
- GNU development system: SmallTalk, Liop, Prolog, & Ada
- GNU C/C++ Complier, Assembler and Debugger for 8800, 80386, 6800, Sparc, & RS/600.
- Interpreters: Pascal to C, Fortron to C, Simula to C, APL & Rexx.
- Full UNIX Utilities and thousands of free applications from the internet around the world.

WE BUILD SYSTEMS TO YOUR NEEDS! VISIT OUR WEBSITE

Seagate	Seagate	New!	New!
Cheetah ST34501W 4.5Gb UWSCSI $Call	Barracuda ST39173W 9.1Gb UWSCSI $Call	Intel Seattle SE440BX 100Mhz Bus Speed MotherBoard Available Now! $Call	Intel N440BX 100Mhz Bus Speed Server Mainboard Call Now!

IQ INFOQUEST COMPUTER

IQ LEVEL-6 X² PENTIUM® II — X² DATA CRUISER

- Dual Intel PENTIUM II 233Mhz Processor w/MMX Technology (CPU L2-512K Cache)
- SuperMicro P6DBS Dual Pentium II Mainboard
- 64Mb SDRAM 100Mhz (168Pins 1x64M)
- 1.44Mb Floppy Drive
- 4.3Gb Ultra Wide SCSI HDD
- Built-In Adaptec 7895 Dual Channel Ultra Wide SCSI Controller with RAID port
- Built-In Ultra IDE (DMA/33) & Hi-Speed I/O
- ATX1 Full Tower Case, 250Watts 2.01 P.S.
- Decaview GA380 (17" 1600x1280@76Hz .25dpi)
- Diamond Viper 330 4Mb SGRAM (AGP-128bit)
- Toshiba 32X SCSI CD ROM Drive
- Sound Blaster 64 PnP Value
- Yamaha M7 Speakers
- MS Natural Keyboard
- Logitech 1st Mouse Plus (Internet Mouse)
- CD: Microsoft Windows NT 4.0 WorkStation

Value Buy!

$2315

2x Pentium II 266Mhz .. $2415
2x Pentium II 300Mhz .. $2685
2x Pentium II 333Mhz .. $2975
2x Pentium II 350Mhz .. $3195
2x Pentium II 400Mhz .. $3655

IQ LEVEL-6 X² PENTIUM® II — X² POWER SERVER

- Dual Intel PENTIUM II 300Mhz Processor w/MMX Technology (CPU L2-512K Cache)
- Tyan 1836DULAN Dual Pentium II Mainboard
- 128Mb SDRAM 100Mhz (168Pins 2x64M)
- 1.44Mb Floppy Drive
- 4.5Gb Seagate Ultra Wide SCSI HDD
- Built-In Adaptec 7895 Dual Channel Ultra Wide SCSI Controller with RAID Port
- Built-In Ultra IDE (DMA/33) & Hi-Speed I/O
- Built-In Intel EtherExpress Pro 10/100B NIC
- ATX1 Full Tower Case, 250Watts 2.01 P.S.
- Decaview PA380 (17" 1600x1280@76Hz .25dpi)
- Diamond FireGL 1000 Pro 8Mb AGP
- Built-In Creative Vibra 16XV Audio
- Toshiba 32X SCSI CD ROM Drive
- Yamaha M7 Speakers
- MS Natural Keyboard
- MS Intellimouse & Mouse Pad
- CD: Microsoft Windows NT 4.0 Workstation

Power Server!

$2935

2x Pentium II 333Mhz..$3225
2x Pentium II 350Mhz..$3445
2x Pentium II 400Mhz..$3905

IQ LEVEL-6 X² PENTIUM® II — X² INFOMOVER

- Dual Intel PENTIUM II 300Mhz Processor w/MMX Technology (CPU L2-512K Cache)
- Intel N440BX Dual Pentium II Mainboard
- 128Mb SDRAM 100Mhz (168Pins 2x64M)
- 1.44Mb Floppy Drive
- 4.5Gb Seagate Ultra Wide SCSI HDD
- Built-In Symbios Ultra Wide SCSI Controller
- Built-In Ultra IDE (DMA/33) & Hi-Speed I/O
- Built-In Intel EtherExpress Pro 10/100B NIC
- ATX Full Tower Case, 300 Watts 2.01 PS
- Decaview PA630 (21" 1800x1440@76Hz .28dpi)
- Diamond FireGL 1000 Pro 8Mb (AGP)
- Toshiba 32X SCSI CD ROM Drive
- Built-In Crystal Sound Card
- Yamaha M7 Speakers
- MS Natural Keyboard
- MS Intellimouse & Mouse Pad
- CD: Microsoft Windows NT 4.0 Workstation

Super Deal!

$3420

2x Pentium II 333Mhz ...$3610
2x Pentium II 350Mhz ...$3830
2x Pentium II 400Mhz ... $4290

SOUND CARD
Creative Lab SB16 PnP $40
Creative Lab AWE64 PnP.....$70
Creative Lab AWE64 Gold $149
Creative Lab Ensonic PCI-64....$55

CD-ROM DRIVES
TOSHIBA (24X-IDE) $70
TOSHIBA (32X-IDE) $80
TOSHIBA (32X-SCSI).....$110

CD-ROM RECORDER
Mitsubishi (Int)
2x2x6 IDE CDRewritable $375
4x12 IDE CDRecorder.....$415
RICOH (Int)
2x6 IDE CDRewritable $399
2x6 SCSI CDRewritable $465
SONY (Int)
928-IDE-CDRecorder.....$330
4x12 SCSI CDRecorder .....$Call
Yamaha (Int)
2x4x6 SCSI CDRewritable ...$599

CONTROLLER
Adaptec SCSI
2940U Ultra SCSI.....$149
2940UW Ultra Wide SCSI.....$175
2940U2W Ultra 2 Wide SCSI....$380
3940UW Ultra Wide SCSI.....$Call
AAA 131 RaidCtrl .....$Call
AAA 133 Raid Ctrl .....$Call
ARO 1130CA Raid Ctrl .....$Call
ARO 1130SA Raid Ctrl .....$Call

FAX/MODEMS
Supra 56K Express F/M (int).....$80
Supra 56K V.90 F/M/V(int).....$95
USRobitics 56K F/M (int) $100
USRobitics 56K F/M/V (int).....$110
USRobitics 56K V.90 F/M (int).$165
USRobitics 56K V.90 F/M/V....$185

MONITORS
Decaview
G380 17" 1280x1024 0.28.....$289
G387 17" 1600x1280 0.25.....$359
GA37 17" 1600x1280 0.25.....$415
PA380 17" 1600x1280 0.25.....$455
PA630 21" 1800x1440 0.28.....$815

HYAMA (IDEK)
8617e 17" 1600x1280 0.26.....$535
9017e 17" 1600x1280 0.25 .....$685
NANAO
FX-C5 17" 1280x1024 .....$695
FX-C6 17" 1600x1280 0.26.....$785
TX-C7S 17" 1600x1280 0.25..$1025
TX-D7S 20" 1600x1280 .....$1635
NEC
A700 17" 1280x1024 0.28 .....$535
E700 17" 1280x1024 0.25 .....$680
P750 17" 1600x1280 0.25 .....$780
E1100 21" 1280x1024 0.28.....$1250
P1150 21" 1600x1280 0.28.....$1395
SONY
200ES 17" 1280x1024 0.25 .....$535
200GS 17" 1280x1024 0.25 .....$635
200PS 17" 1600x1280 0.25.....$785
400PS 19" 1600x1280 0.25 .....$975
500PS 21" 1600x1280 0.30 ....$1495
VIEWSONIC
G773 17" 1280x1024 0.26.....$485
G790 19" 1600x1280 0.26.....$890
G810 21" 1600x12804 0.25....$1135
GT775 17" 1600x1280 0.25.....$599
P655 15" 1280x1024 0.25 .....$Call
P775 17" 1600x1280 0.25 .....$565
P815 21" 1600x1280 0.25 .....$1400
PT775 17" 1600x1280 0.25 .....$680
PT813 21" 1600x1280 0.25 ....$Call

VIDEO CARDS
ATI All In Wonder (PCI)
4Mb EDORAM $155
ATI All In Wonder Pro (AGP)
4Mb SGRAM $240
8Mb SGRAM $280
ATI 3D Xpression+ (PC2TV)
4Mb SGRAM $100
ATI 3D Pro Turbo (PC2TV)
4Mb SGRAM $125
8Mb SGRAM $165
ATI Xpert @ Work (AGP)
4Mb SGRAM $140
8Mb SGRAM $180
ATI Xpert @ Play (PC2TV)
4Mb SGRAM.....$160
8Mb SGRAM.....$200
ATI Xpert XL
4Mb EDORAM $95
Diamond Stealth 3D 2000 Pro
4Mb EDORAM $80
Diamond Stealth 3D 4000
4Mb SGRAM .....$Call
Diamond Viper 330 (AGP/PCI)
4Mb SGRAM .....$Call
Diamond FireGL 1000 Pro
4Mb SGRAM $155
8Mb SGRAM .....$Call
Diamond FireGL 3000
16Mb (8V+8E RAM) .....$Call
24Mb (8V+16E RAM).....$Call
40Mb (8V+32E RAM) .....$Call
Diamond FireGL 4000 (PCI)
16Mb (8V+8E RAM) .....$Call
24Mb (8V+16E RAM).....$Call
40Mb (8V+32E RAM) .....$Call
Diamond Monster 3D (PCI)
4Mb EDORAM $140
Diamond Monster 3D II (Voodoo-2)
4Mb EDORAM $255
8Mb EDORAM .....$Call
Intel 3D740 4Mb SGRAM.....$Call
Matrox Millennium II (AGP)
4MbWRAM.....$159
8MbWRAM.....$Call
Matrox Mystique 220
2Mb SGRAM .....$Call
4Mb SGRAM .....$Call
Matrox Productiva G100 (AGP)
4Mb SGRAM .....$Call
8Mb SGRAM .....$Call

NETWORK CARD
3COM
3COM 3C509B T/P.....$50
3COM 3C900 PCI T/P.....$Call
3COM 3C900 PCI Combo.....$79
3COM 3C905 PCI 10/100 T/P...$75
Intel
EtherExpess Pro 10/100+T/P....$65

TAPE BACKUP
IOMEGA
Zip Drive 100Mb SCSI (int)....$125
Zip Drive 100Mb IDE (int).....$95
Jaz Drive 1.0Gb SCSI (Int).....$295
Jaz Drive 1.0Gb SCSI (Ext).....$395
Syquest
EZ-SyJet 1.0Gb (Int).....Call
EZ-SyJet 1.5Gb SCSI (Ext).....Call
HP
HP C1536 2~4Gb DAT Drive ..$565
C1536 Mounting Frame.....$25
HP C1599 4~8Gb DAT Drive ..$785
C1599 Mounting Frame.....$25
HP Autoloader Magazine C1570A 5x 4mm DDS3 DAT Tapes.$145

PRICE SUBJECT TO CHANGE WITHOUT NOTICE NOT RESPONSIBLE FOR TYPOS!

MONITOR
DECAVIEW G380 PROMOTION SALES *CALL FOR DISTRITION
- 17" Monitors (16" Viewable Area)
- Use Toshiba Tube
- Up to 1280x1024@66Hz 0.28dpi
- Bandwidth 110 Mhz
- 3 Yrs Manufacturer Warranty

$289

MONITOR
DECAVIEW G387 WITHPROMOTION SALES *CALL FOR DISTRITION
- 17" Monitors (16" Viewable Area)
- Use Panasonic Tube
- Up to 1600x1280@75Hz 0.28dpi
- Bandwidth 110 Mhz
- 3 Yrs Manufacturer Warranty

$359

MONITOR
DECAVIEW GA387 PROMOTION SALES *CALL FOR DISTRITION
- 17" Monitors (16" Viewable Area)
- Use DiamondTron Tube
- Up to 1600x1280@75Hz 0.25dpi
- Bandwidth 158 Mhz
- 3 Yrs Manufacturer Warranty

$415

MONITOR
DECAVIEW PA380 PROMOTION SALES
- 17" Monitors (16" Viewable Area)
- Use DiamondTron Tube
- Up to 1600x1280@75Hz 0.25dpi
- Bandwidth 200 Mhz
- 3 Yrs Manufacturer Warranty

$455

MONITOR
DECAVIEW PA630 PROMOTION SALES
- 21" Monitors (20" Viewable Area)
- Use DiamondTron Tube
- Up to 1800x1440@76Hz 0.28dpi
- Bandwidth 200 Mhz
- 3 Yrs Manufacturer Warranty

$815

DAT DRIVE MAGAZINE
HP DAT DRIVE MAGAZINE HP C1570A Clearance Sales !
- HP C1570A - DAT Magazine
- 5 - 120mm DDS-3 DAT Cartridges
- 1 - Cleanning DAT Cartridge

$145

continued from page 42

I'm working on arranging a hands-on evaluation, so keep your eyes peeled for more information. I'm very curious what the real-world differences are between traditional cellular services and iDEN.

80% of the batteries that are thrown out can actually be reused.

The Doctor Is In

With the exponentially growing proliferation of battery-powered devices and the special handling required to recycle NiCad batteries, I'm happy to report that there is a very cool new service available from a company called the Battery Doctor. They will revive a Ni-Cad battery, if possible, for a fee or recycle it for you at no charge, if it is not reviveable.

According to the company, 80% of the batteries that are thrown out can actually be reused. NiCad cells are apparently designed to last 2,000 to 3,000 charges; however, they can develop the "memory" effect in as little as 150 charges and most are replaced after only 300 charges!

The fee for a cordless power tool battery is only $7.50. Camcorder and cell phone batteries are $15 and laptop batteries are $25.

Getting it Write

Cross Pen Computing Group has introduced a combination PDA stylus and ink pen called the DigitalWriter DUO ($34.95). On one side it has a stylus tip featuring its "pen-on-paper feel." On the other end is a ballpoint pen. I've tried Cross pens and the difference is quite remarkable, compared to my PalmPilot's cheesy plastic stylus. (Note: The soon-to-be-released Palm III's stylus is suppose to be metal.) Although this is a nice feature—I can't tell you how many times someone has asked me for a pen and all I have is my PalmPilot—I'd be slightly worried that I might accidentally write on the PDA's screen with the pen side. (Heck, I've (unsuccessfully) attempted to write on a piece of paper with the plastic stylus, so I guess the odds are not totally against the reverse happening.)

Resources:

Motorola
1-800-353-2729
www.motorola.com/talkabout
www.motorola.com/iden

Nextel
www.nextel.com

The Battery Doctor
(209)474-6677
doctor@batterydoctor.com
http://batterydoctor.com

DigitalWriter DUO
Cross Pen Computing Group
1-800-510-9660
www.cross-pcg.com

Name Calling Halted

In my last installment, I reported that Palm Computing had filed a suit against Microsoft regarding their use of the term Palm PC to describe their new handheld Window CE units. Apparently the two sides have come to an agreement and Microsoft will now refer to their products as Palm-size PCs.

Well, that's if for now. My mailbox is beginning to fill up with information on lots of cool gadgets. So until next time, keep reaching for the stars and keep those batteries charged. ◆

Copyright © 1998 by Douglas J. Nakakihara. All rights reserved.

Custom ULTRA SCSI Solutions

SCSIVue Active Terminator
From $59
Optional Remote Display 50MD
Four models available with optional Remote LED Pak. These are the finest terminators available, they fix SCSI problems and improve reliability.
Benefits:
• Improves SCSI Bus Performance
• Less Errors; More Reliable Data Transfer
• Diagnoses Problems • Analyzes Signal Quality
Features:
• Active Regulation • Fast 50 & Fast Wide 68
• Status Indicators • Gold Contacts

Active 2-1 Switch/Repeater
From: $599
Benefits:
• Up to 14 Devices to 1 Computer
• Share Devices Between 2 Computers
Features:
• 2-1 Active Digital Switch/Repeater
• Regenerates SCSI Signal for Long Runs

Gold Diagnostic Adapters
Styles: Gender Changers
• Both 50 pin and 68 pin (all combinations)
Gender Changer
Styles: 68 pin Drive to 50 Bus
• 68 Pin Drive to 50 Pin IDC (runs wide drive as narrow)
Drive Bus Changer (run 68 pin on 50 pin bus
Styles: 68 Pin Adapter Wide to 50 Pin Narrow
• 68 Pin External Adapter to 50 Pin (converts Host Adapter)
From: $49
68 Pin to 50 Pin Centronics or 50 Pin MicroD Adapters
Styles: For Adaptec Ultra Wide Cards
• Adapters with partial termination built in for 68 to 50 converters (converts Host Adapter)

SCSIVue™ Gold Diagnostic Cables
Features:
• Diagnostic Indicators
• Large Ferrite Filters
• Triple Shielding (Unique Design)
• Double Gold 20u" Plated Connectors
• Extra Heavy 26 Gauge Wire • 100 Styles in Stock
From: $39
Benefits:
• No Loss Of Important Data
• Faster Performance
• Test Cable Integrity

Teflon® External 90 Ohm SCSI Cables
From: $159
Features:
• Perfect 90 Ohm Impedance Match
• Triple Pronged Connector With Gold contacts

Custom Teflon Int. Cables
Teflon® is a registered trademark of DuPont
Benefits:
• Less Errors, Ultimate Performance
• Silver Wire Improves Signal Quality
Features:
• Perfect 90 Ohm Impedance • Custom in 1 Day
• Triple Pronged Connector - Gold contacts Silver Wire
50 Pin Replacement Cable for External Drive Cases.

68 Pin Internal Cables, custom or stock, from 1 to 15 SCSI devices per cable. We can also make Custom 68 pin and 50 pin Combination Cables that allow you to use narrow drives on a wide cable.

Cable Tester - LED Readout
This Digital SCSI Cable Tester can test all the popular cable styles for opens, shorts, and unreliable operation. Battery powered for easy use anywhere you need it. Three models to choose from:
• 50 pin Centronics
• 50 pin IDC
• 68 pin MicroD
From: $49

Gold Ultra SCSI Cases
Ultra SCSI Teflon Cable Available
Custom Setup in 1 Day for Raid & Arrays
From: $99
2 Bay Tower
NEW! Temperature ALARM! Automatic Monitor & Control
From: $59
The Vertical 3.5" Case Kit offers a small transportable package. Ideally suited for moving around, this durable case can take a beating. Universal 35 Watt power supply.
The Horizontal 3.5" or 5.25" Case Kit Offers a stackable solution for any desktop need. Shown with Optional Bay Cooler installed.
Open Face and Closed Face Models Available.
Optional 50 or 68 Teflon® Cables Available.
Bay Cooler Kit keeps those HOT Ultra SCSI Drives COOL as ICE!
Dual Fan & Bracket $29
HOT SWAP Pull Out Bays
Compatible with all 50 pin & 68 pin SCSI Buses up to Fast SCSI 2. From: $79.00

Active Digital SCSI Repeater
Power Supply Included
From: $139
Benefits:
• Models for all SCSI types
• Fixes SCSI Cable Problems
Features:
• Doubles Cable Length (up to 18')
• Active Termination and Signal Purification
• Ultra Fast Performance for Added Capabilities
• Diagnostic Capabilities • 30u" Gold Contacts

Granite Digital
Online Catalog at... www.scsipro.com
The SCSI Solution Company
3101 Whipple Rd. • Union City, Ca. 94587 • Ph: 510-471-6442 • Fax 510-471-6267

Transfer your 35mm color or black & white negatives or slides onto a Photo CD

KODAK FLASHPIX!
Why you'll like it...
• FlashPix format is not power hungry
• Printing is predictable
• Using pictures takes less RAM and disk space
• Multiple images display easily

PHOTO CD OFFER
$10 Off
Your First Photo CD Transfer
• Minimum order is $21
• First-time customers only
• Must present this coupon
• Not to be combined with any other offers
• Promotion expires June 30, 1998

Now Get Brilliant Kodak Dye Sub Prints From Your Computer File
We just added a Kodak 8650 Dye Sublimation Printer to create fantastic photo-realistic quality prints or transparencies from your MAC or PC files. No banding, jaggies, dots or steps! Just beautiful continuous-tone glossy prints up to 8x10 on 8-1/2 x 12 paper.

WE PROVIDE SPEEDY SERVICE
• Rush Service Available
• 2 Day Fast Turnaround (Working Days)
• Ship us your order & we'll ship it back for free

Photo CD service includes limited color correction & image rotation

ITS CD
IMAGE TRANSFER SYSTEM
ITS CD
Tel: 415-682-3981 • Fax: 415-682-3980
514 Frederick Street • San Francisco, CA 94117
(Near Stanyan)
M-F 10-7 Sat + Sun 10-5

KONICOM

OUR SPECIALS ARE THE BEST VALUES IN TOWN!

System Special of the Month

Deluxe Tower Case / Power Supply
Intel® 300MHz Pentium™ II Processor – 512K L2
Intel® 440LX / 440BX Chipset on board
64MB RAM Memory Chips
Enhanced IDE HD/FD Controller
3 ½" internal Floppy Disk Drive
4.3 GB Internal IDE Hard Drive – UDMA
3D SVGA Video Card with 4MB RAM – AGP
Windows 95™ Enhanced Keyboard
PSII Logitech® Mouse with 2 buttons
32X E-IDE Internal CD-ROM Drive
16 Bit SoundBlaster Compatible Soundcard
100Watts PMPO Stereo Amplified Speakers
56K FAX, DATA and VOICE Internal Modem
Microsoft® Windows 95 CD / Manuals
Groller's Encyclopedia CD plus 6 Titles
MONITOR SOLD SEPERATLY

$ 1,088.88

Intel® Pentium™ II 233MHz MMX™	$ 899.98
Intel® Pentium™ II 266MHz MMX™	$999.98
Intel® Pentium™ II 300MHz MMX™	$1,088.88
Intel® Pentium™ II 333MHz MMX™	$1,249.98
Intel® Pentium™ II 350MHz MMX™	$1,369.98
Intel® Pentium™ II 400MHz MMX™	$1,599.98

Monitors
(with system purchase only)

14" Super VGA (0.28mm dot)	$ 125.00
15" Flat Screen SVGA (0.28mm)	$ 169.98
17" Digital Control (1280X1024)	$ 269.98
17" Relysis (1280X1028–0.26mm)	$ 349.98
19" Flat Screen, Digital - 0.26mm	$ 499.98

KCI Value HOME PC

Mini Tower Case / Power Supply
ASUS® Motherboard
Intel® 233MHz Pentium® II processor
Intel® 430TX / 440LX / 440BX Chipset
512K Pipe-line burst Cache Memory
64MB RAM Memory Chips
4 E-IDE HD and 2 FD Controller
2 HI Speed Serial and 1 Parallel Port
3.5" Floppy Disk Drive
3.2GB Ultra DMA Internal IDE Hard Drive
S3 3D Virge DX Super VGA Video - 4MB
MPEG / Video CD Ready
Windows® 95 Enhanced 104 Keyboard
Logitech® Mouse - 2 buttons – Serial
56K Internal Fax /Data Modem
Internal 24X Internal CD-ROM
ESS® 16 Bit SoundBlaster Comp. Soundcard
100Watts PMPO Amplified Speakers
15" NI – SVGA Monitor - 0.28mm dot
Microsoft® Office 97 Professional CD
Microsoft® Windows 95 CD Software

$ 1,188.88

AMD® K6™ 166MHz with MMX™	$ 999.98
AMD® K6™ 200MHz with MMX™	$ 1,029.98
AMD® K6™ 233MHz with MMX™	$ 1,099.98
Cyrix® M2™ 200MHz with MMX™	$ 999.98
Cyrix® M2™ 233MHz with MMX™	$ 1,099.98
Intel® Pentium™ 166MHz MMX™	$ 1,049.98
Intel® Pentium™ 200MHz MMX™	$ 1,099.98
Intel® Pentium™ 233MHz MMX™	$ 1,199.98
Intel® Pentium™ II 233MHz MMX™	$ 1,188.88
Intel® Pentium™ II 266MHz MMX™	$ 1,299.98
Intel® Pentium™ II 300MHz MMX™	$ 1,399.98
Intel® Pentium™ II 333MHz MMX™	$ 1,499.98
Intel® Pentium™ II 350MHz MMX™	$ 1,599.98
Intel® Pentium™ II 400MHz MMX™	$ 1,899.98

KCI – Starter PC SPECIALS

Deluxe Tower Case / 230W Power Supply
Cyrix 6x86 – P200+ MHz processor
CPU Cooling Fan / heatsink
QDI® SpeedEasy™ Motherboard
Award® BIOS, 3 ISA, 4 PCI Slots
512K Pipe-line burst Cache Memory
32MB RAM Memory
2 HI Speed Serial and 1 Parallel Port
3.5" Internal 1.44MB Floppy Disk Drive
2GB Hard Drive – enhanced IDE
Super VGA Video Card – MPEG / Video CD
33.6K Fax and Data Modem
Windows® 95 Enhanced Key Keyboard
Logitech® Mouse - 2 buttons – Serial
24X Internal CD-ROM with Sound Card
14" Non-Interlaced Monitor 0.28mm dot
Microsoft® Windows 95 CD
Lotus SmartSuite 97 CD includes :
Lotus® Organizer / Lotus® Freelance
Lotus® 123 / Lotus® WordPro
Lotus® Approach

$ 699.98

AMD® K6™ 166MHz with MMX™	$ 699.98
AMD® K6™ 200MHz with MMX™	$ 749.98
AMD® K6™ 233MHz with MMX™	$ 799.98
Cyrix® M2™ 200MHz with MMX™	$ 699.98
Cyrix® M2™ 233MHz with MMX™	$ 749.98
Intel® Pentium™ 166MHz MMX™	$ 699.98
Intel® Pentium™ 200MHz MMX™	$ 749.98
Intel® Pentium™ 233MHz MMX™	$ 899.98
Intel® Pentium™ II 233MHz	$ 999.98
Intel® Pentium™ II 266MHz MMX™	$ 1,099.98
Intel® Pentium™ II 300MHz MMX™	$ 1,199.98
Intel® Pentium™ II 333MHz MMX™	$ 1,299.98
Intel® Pentium™ II 350MHz MMX™	$ 1,399.98
Intel® Pentium™ II 400MHz MMX™	$ 1,749.98

KCI DVD BOX

Deluxe Tower Case / POWER SUPPLY
Intel® 233MHz Pentium® processor
Intel® 430TX / 440LX Chipset
512K Pipeline Burst Cache
32 MB EDO RAM Memory Chips
2 Serial and 1 Parallel Port
Award® BIOS, 3 ISA, 4 PCI Slots
MITSUMI® 3.5" Floppy Drive
4.3 GB Hard Drive – Ultra DMA
Matrox® Millennium II 4MB Video Card
104 Keys Windows 95 Keyboard
Logitech® Mouse - 2 Buttons
56K Internal Fax/Data/Voice Modem
Creative® Internal DVD CD-ROM
Creative® MPEG2 Dxr2 Decoder
DVD and VCD Movies Playback
Creative® SoundBlaster AWE64
240 Watts Amplified Speakers
15" SVGA Monitor – Digital Controls
Microsoft® Windows 95™ CD
FREE DVD Movie title of choice

$1,399.98

AMD® K6™ 166MHz with MMX™	$ 1,288.98
AMD® K6™ 200MHz with MMX™	$ 1,299.98
AMD® K6™ 233MHz with MMX™	$ 1,399.98
Cyrix® M2™ 200MHz with MMX™	$ 1,299.98
Cyrix® M2™ 233MHz with MMX™	$ 1,399.98
Intel® Pentium™ 166MHz MMX™	$ 1,288.98
Intel® Pentium™ 200MHz MMX™	$ 1,299.98
Intel® Pentium™ 233MHz MMX™	$ 1,399.98
Intel® Pentium™ II 233MHz MMX™	$ 1,499.98
Intel® Pentium™ II 266MHz MMX™	$ 1,599.98
Intel® Pentium™ II 300MHz MMX™	$ 1,699.98
Intel® Pentium™ II 333MHz MMX™	$ 1,799.98
Intel® Pentium™ II 350MHz MMX™	$ 1,899.98
Intel® Pentium™ II 400MHz MMX™	$ 2,099.98

Peripherals on Sale

MEMORY MODULES

2X32 Fast Page or EDO - 8MB	$ 19.98
4X32 Fast Page or EDO - 16MB	$ 24.98
8X32 Fast page or EDO – 32MB	$ 39.98
4X64 SDRAM Module - 32MB	$ 49.98
8X64 SDRAM Module - 64MB	$ 119.98

SCSI Controllers

PCI version SCSI Card	$ 49.98
Adaptec® 2940UW – PCI	$ 195.00

Keyboards

Mitsumi® 104 Key - Windows 95	$ 11.98
Keytronic Keyboard - Windows 95	$ 29.98
Microsoft® Natural Keyboard	$ 59.98

Chassis

Minitower with 230W Power Supply	$ 25.00
Super Mini with 230Watts PS	$ 28.00
Deluxe ATX Tower Case / PS	$ 59.98

Monitors

14" Non-Interlaced 0.28mm dot	$ 149.98
15" Non-Interlaced - Digital Controls	$ 199.98
17" NI 1280X1024 - Digital Controls	$ 319.98

Sound Cards

Creative® SoundBlaster AWE 64 Gold	$ 189.98
ESS® 1869 16 Bit Sound Card	$ 19.98
Zoltrix Video Capture / TV Tuner	$ 89.98
Toshiba Camera	$ 89.98

GREAT DEALS OF THE MONTH

Hard Drives

3.2GB Ultra DMA IDE Hard Drive	$ 139.98
4.3GB Ultra DMA IDE Hard Drive	$ 149.98
Western Digital® 6.4GB UDMA IDE	$ 219.98
2.1GB SCSI Hard Drive – 7200 rpm	$ 199.98

Modems

56K Int. Fax/Data/Voice Modem	$ 39.98
Rockwell® 33.6K Fax / Data Modem	$ 39.98

Multimedia / Video

Internal 32X IDE CD-ROM	$ 59.98
S3® Virge 3D with 4MB EDO Video	$ 44.98
SIS® 4MB AGP Video Card	**$ 39.98**
ATI® All In Wonder PRO with 4MB	$ 199.98
Matrox® Millennium II with 4MB AGP	$ 129.98
ESS® 1869 Sound Card / Speakers	$ 18.00
Creative® Value AWE64 CD Kit	$ 169.98
Creative® SoundBlaster AWE 64	$ 69.98

Motherboards / Processors

BIOSTAR® 430TX – 512K PLC MB	$ 89.98
BIOSTAR® **SUPERTX MB – 512K**	$ 69.98
With Intel® Pentium 200MHz MMX	$ 199.98
ASUS® Pentium II Motherboard	$ 149.98
With Intel® PII - 300MHz Processor	$ 539.98

NETWORK

16Bit ISA Ethernet Cards (Combo)	$ 14.00
32Bit PCI Ethernet Cards (Combo)	$ 16.00

Peripherals on Sale

Motherboards

BIOSTAR® TLC Pentium II MB	$ 125.00
BIOSTAR® 8500TTD – 512K PL Cache	$89.98
QDI® 430VX Explorer II SpeedEasy	$ 99.98
QDI® Titanium - 512K – 430TX	$ 109.00
QDI® Natoma Pentium Pro	$ 175.00
ASUS® TX97e - 512K PLC	$ 135.00
ASUS® P2L97 Pentium II Motherboard	$ 149.98
ASUS® P2L97-S Pentium II – SCSI	$ 249.98
ASUS® P2L97-DS Pentium II - Dual	$ 399.98

Video Cards

ATI® Xpert@Play with 4MB SGRAM	$ 179.98
Diamond Fire Pro 1000 – 4MB AGP	$ 159.00
Diamond® Viper Pro 330 – 4MB	$ 139.98
Matrox® Millennium II – 4MB WRAM	$ 149.98
Trident® 9680 PCI with 2MB	$ 29.98

Modems

Zoltrix® Rockwell® Fax & Data 33.6K	$ 39.98
Zoltrix® Rockwell® Fax & Data 56K	$ 69.98
Zoltrix® Rockwell® F/D/Speakerphone 33.6K	$ 65.00
US Robotics Sportster F/D/V 33.6K	$ 75.00
US Robotics Sportster F/D 56K	$ 109.98

CDROMS / Multimedia

Toshiba 32X Internal IDE CD-ROM	**$ 69.98**
Toshiba 24X Internal IDE CD-ROM	$ 59.98
Creative DVD Kit	$ 279.98

1443 Noriega Street
San Francisco, Ca. 94122
Tel : (415) 664-3268
Fax : (415) 664-0883
MON-SAT:9:30AM – 7:00PM

1921 S. El Camino Real
San Mateo, Ca. 94403
Tel : (650) 577-1690
Fax : (650) 577-8841
MON-SAT:11:00AM – 7:00PM

550 Barber Lane
Milpitas, CA. 95035
Tel: (408) 943-8228
Fax: (408) 943-1898
MON-SAT:11:00AM – 7:00PM
SUNDAY : 11AM-6PM

✪ Dealer inquiries welcome ✪ 1 Year parts and 5 years labor warranty ✪ Prices subject to change without notice ✪ Not responsible for typographical errors
✪ All trademarks are registered trademarks of their respective companies ✪ 3% Cash discount ✪ web address : www.beyond2k.com/kci ✪ email : kci@ako.com

Working At Home In 1997

The Statistics

By Robert Moskowitz

More than half of the people doing some of their work at home were not paid expressly for their time as teleworkers.

According to the US Bureau of Labor Statistics, more than 21 million people did some work at home as part of their primary job during 1997. But only a portion of these were true teleworkers.

In a special supplement to its Current Population Survey (CPS), which surveys about 50,000 households and provides data on the nation's labor force, the BLS revealed that about 17% of the total (or some 3.6 million people) were wage and salary workers who were paid for the hours they clocked on the job at home. More than half of the people doing some of their work at home were not paid expressly for their time as teleworkers. Nearly all the rest were self-employed workers, with about two-thirds of them working within the structure of a home-based businesses. Other interesting facts include:

• The number of actual telecommuters—that is, wage and salary workers who were not being officially compensated for the work they did at home, but who were simply "taking work home from the office" as part of their overall responsibilities—totaled about 11.1 million. These people were overwhelmingly employed in white-collar occupations. The largest number of these teleworkers (6.1 million) were employed by companies in the services sector of the economy, while a much smaller number (1.5 million) were employed in manufacturing firms.

• Classified by industry segment, about 1.6 million wage and salary workers from services industries were doing officially "paid work" at home—roughly 44% of the total 3.6 million; more than half-a-million from manufacturing industries were paid for work at home. All the major industry groups (except mining) had significant numbers of workers doing paid work at home.

• Wage and salary workers who were paid for working at home averaged nearly 15 hours-per-week at home; those who weren't paid specially for working at home clocked about 9 hours-per-week at home; home-based entrepreneurs worked about 23 hours-per-week at home, on average.

• Women and men were about equally likely to work-at-home. The work-at-home rate for married parents was about the same as the rate for married persons without children. Whites were more than twice as likely to be engaged in some form of home-based work as either Blacks or Hispanics.

• Just under 60% of those who worked at home in 1997 used computers. Among wage and salary workers, computer use was about the same for those who were paid for work done at home (63.3%) as for those doing unpaid work at home (61.6%). Paid home workers were more likely to use a modem for their work at home (43.2%) than were unpaid home workers (32.8%). Also, 23.2% of paid home workers used a telephone line that was furnished by their employer. Only 54.4% of self-employed home workers used a computer for work done at home.

Squeezing Employees Out Into Telecommuting?

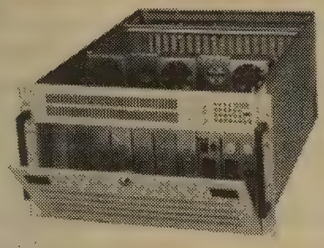
Telecommuting has been shown many times to be a great way to cut facilities costs, primarily by reducing the number of square feet needed to support a given number of employees. For example, if only half a company's workforce telecommutes just one day-a-week, the company can instantly trim their office space requirements by 10%! And the savings fall right to the bottom line.

But the stakes in this struggle continue to increase. In New York City, for example, rents that were recently $16.50 per foot per year are now rising past $23—nearly a 50% increase in just two years. In many areas of California, office vacancies are at or near a ten year low, and rents are rising apace. As the cost of occupying office space grows higher, facilities managers are coming to recognize the exciting cost effectiveness of accommodating the growth in

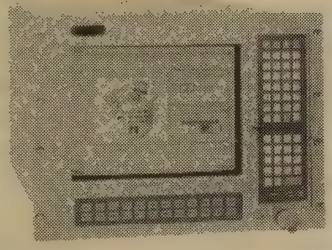
Helping with Your

Industrial PC Systems Solutions

Since 1990

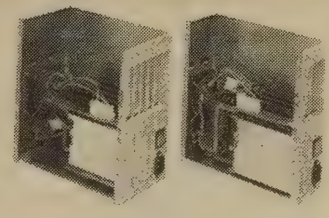


- 6U Rackmount Chassis
- 20-Slot ISA/PCI BP Option: 10+10, 5+5+5+5
- Redundant Power Supply
- 8 Drive Bays

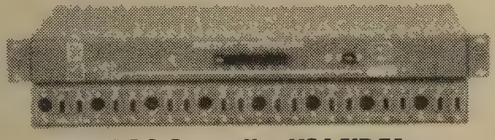


- 19" Industrial Rackmount Workstation
- Built-in 14" or 15" Color SVGA Monitor (or 9.4/10.4/14" Color LCD)
- PS Universal 65-265 VAC Input or DC/+12,+24, -48V Input
- 4/8/10/12/14 Slot ISA/PCI Backplane Option

- 2U Height (3.5") Chassis
- 4 Drive Bays, 1-CD, 1-FD, 2-HD
- PS AC Universal, or DC/+12, +24, -48V
- 5-Slots
  Type 1: 2-PCI, 2-ISA, 1-CPU (PICMG)
  Type 2: 5-ISA
  Type 3: 4-PCI, 1-CPU (PICMG)

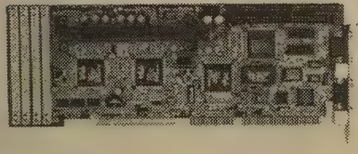


- Compact Size
- Wall Mount, Rackmount or Stand-Alone Chassis
- 3-slot/5-Slot
- Power Supply: AC Universal or DC/+12, +24, -48V

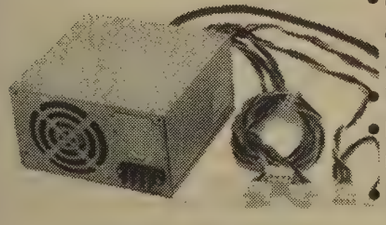


- Multi-PC Controller VGA/KB/Mouse (Audio/Voice Option)
- Auto Scan or Manual Control
- 4/6/8/16 Ports Available

SBC-Pentium® II



- Full Line of Single Board Computers
- 486-Pentium® Pro CPU
- Full line of BP
- 3-20 Slots ISA/PCI Segmented, 6+8, 10+10, 5+5+5+5 and others



- 85-265 VAC, -48VDC, +24VDC, +12VDC Input
- 70W-350W Output
- 0-55 Degree Celsius Operating
- MTBF>20 Years

ARISE COMPUTER INC.

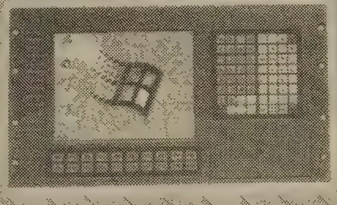
453 Ravendale Drive, Suite #F
Mountain View, CA 94043
Tel: (650) 428-0868 / Fax: (650)428-0866
http://www.arisecomputer.com
E-mail: allen@arisecomputer.com

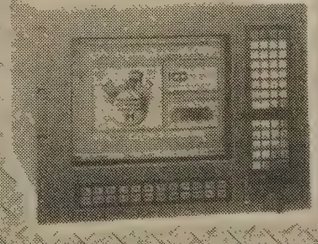
MasterCard VISA

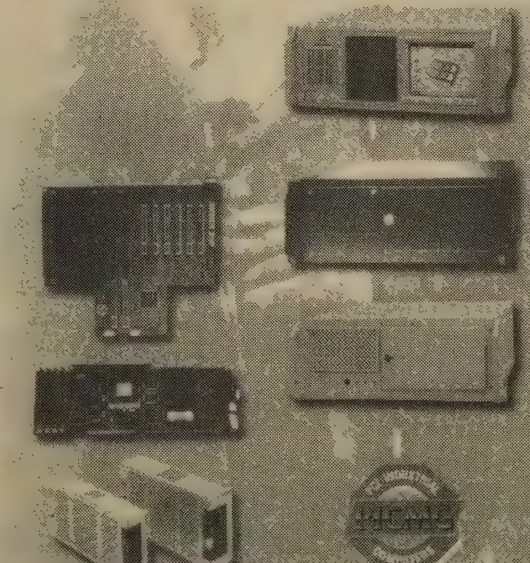
PC/104 PC/104 COMPATIBLE

ARISE Vol. 7.2

Industrial Computer Products







- 486-Pentium™ ISA/PCI SBC
- Industrial AC/DC Input Power Supply
- ISA/PCI Backplane
- Industrial Chassis

CE Platform Compliant

office workforces by rearranging cubicles and cutting down on what now seem like overly spacious allocations of footage, rather than by expanding into new offices.

By using such techniques as "hot desking" or "hoteling" (fancy terms for eliminating empty desks through sharing offices and cubicles on an "as needed" basis), in the decade of the 90s companies like Ernst & Young have learned how to cut their per-person requirements for office space almost in half.

And office furniture makers have cooperated in the continuing squeeze, too. They are now pushing design strategies that integrate communal work areas with tiny cubby-holes intended only to accommodate infrequent but unavoidable moments of privacy. They are also using design techniques like personalized office cabinetry and fitted, curving lines to make smaller furniture feel larger. The goal of all this is to make less space feel more comfortable.

But now the process of saving space through telecommuting may also be working the other way: More and more employers are squeezing their employees' office space allotments, trying to save money a little sooner on facilities costs and also providing a not-so-subtle incentive for employees to spend less time in the centralized office and more time telecommuting.

For example, according to a continuing survey of almost 300 large corporations conducted by the International Facility Management Association, upper management's allocation of office space has shrunk from an average of 289 sq. ft. in 1994 to an average of 280 sq. ft. in 1997. Senior management has lost a little less, going from 200 sq. ft. to only 193 sq. ft. in those three years. Middle management has been squeezed from 151 sq. ft. to 142 sq. ft. during the period, while senior professionals have lost only 1 sq. ft. on average, down from 115 to 114 sq. ft. between 1994 and 1997.

Wage and salary workers who were paid for working at home averaged nearly 15 hours per week at home; those who weren't paid specially for working at home clocked about 9 hours per week at home.

Even these averages belie the realities at a good many firms. At one Boston financial company, for example, a recent move into a new office building triggered a literal downsizing that left managers and administrators with only 42 sq. ft. of office space, compared with a comparatively wide-open 64 sq. ft. in the previous facility.

It's enough to make one think of the joke about the family who begs their village chieftain

continued on page 54

AAA MEDIA, INC
YOUR BACK-UP SOLUTION SPECIALIST
TOLL FREE! 888-282-6291
888-AAA-MEDIA
TEL: 818-718-9625
FAX: 818-718-9626
http://www.aaamedia.com ▲ e-mail-sales@aaamedia.com
PRICES SUBJECT TO CHANGE

4 MM DAT
SPECIAL!
WD-3100 EXT 2GB $517

*WANGDAT-3100	2 GB	$517
*ARCHIVE 4322	2-4 GB	$573
HP C1533A	4-8 GB	$727
AIWA GD-8000	4-8 GB	$657
CDT 8000	4-8 GB	$627
SONY SDT 5000	4-8 GB	$627
SONY SDT 7000	4-8 GB	$727
SONY SDT 9000	12-24 GB	$927

* INCLUDES EXTERNAL PKG.

AUTOLOADER
HP'S INDUSTRY LEADING AUTOLOADER

*ARCH. 4584	16 GB	$798
ARCH. 4592	20 GB	$797
ARCH. 4586	(48-96 GB)	$1027
*HP C1553	24-48 GB	$1697

* INCLUDES EXTERNAL PKG.

8MM EXABYTE

EXB 8200	2-3 GB	$397
*EXB 8205XL	2.3-7 GB	$1127
EXB 8500	5 GB	$897
EXB 8500C	5-10 GB	$997
EXB 8505	5-10 GB	$1297
EXB 8505XL	7-14 GB	$1527
*EXB 8700	14 GB	$795
EXB 8900	20-40 GB	$2727
SONY SDX-300/C	25-50 GB	$2627

* INCLUDES EXTERNAL PKG.

HARD DRIVE

SEAGATE ST32550N 2.3GB BARRACUDA	$427
SEAGATE ST34371N 4.3GB BARRACUDA	$697
QUANTUM QM34550W 9.1GB FAST WIDE	$897
SEAGATE ST19101N 9.1 GB CHEETAH	$997
SEAGATE ST42345N 23GB FAST WIDE	$2127

OPTICAL DRIVE
VALU ADD-ON SONY AUTOMATIC OPTICAL CLEANER W/ ANY 1.3 GB PURCHASE ONLY $67

FUJITSU 2512A	230 MB	$427
*HP C1716C	650 MB	$697
SONY E501	650 MB	$737
APEX MC4600	4.6 GB	$1295
*HP C1716T	1.3 GB	$1097
MAXOPTIX T-3	1.3 GB	$CALL
SONY SMO-F521	1.3 GB	$997
HP C1113F	2.6 GB	$1997
*MAXOPTIX T-4	2.6 GB	$1497
SONY SMO-F544	2.6 GB	$1677

* INCLUDES EXTERNAL PKG.

SPECIAL! C1716C OPTICAL DRIVE 650 MB $697

QUANTUM DLT
HIGH PERFORMANCE BACK-UP!

DLT 600	6.0 GB	$1027
DLT 2000	10-20 GB	$1997
DLT 3000/20XT	15-30 GB	$2327
DLT 4000	20-40 GB	$2627
DLT 7000	35-70 GB	$5527

9 TRACK

HP-07980	$CALL
HP-88780	$CALL
CIPHER M995	$CALL
M4 9914	$CALL

LOW PRICES!

3480 / 3490 / 3990E

DST-9480	$CALL
STC-4220/4280	$CALL
FUJ 2485/2488	$CALL

DEAL!

MEDIA

4MM 60/90	$4.25/5.25
4MM 120	$10.00
8MM 54/112	$3/5.50
8MM 160	$10.50
DLT IIIXT	$CALL
DLT IV	$CALL
CDR 74 M	$1.95
ZIP 100	$9.50

KAO 3M FUJI TDK

OPTICAL

1024B/S 1.3 GB	HP SONY MAXELL	$29.00
1024B/S 2.6 GB		$35.00

LIBRARIES

ADIC 1200	24-96 GB 4MM	$1297
EXB 10i	50 GB 8MM	$1597
EXB 10H	150 GB 8MM	$4327
DLT 4700	280 GB DLT	$7127
HP 20XT OPT.	20 GB	$3157

LARGEST DISTRIBUTER OF STORAGE PRODUCTS ▲ BEST PRICE & PRODUCT ▲ GOVERNMENT, SCHOOL PO'S, QUANTITY ORDERS WELCOME ▲

▲ ALL DRIVES INCL NOVABACK SOFTWARE ! ▲ FOR EXTERNAL PACKAGE ADD $98 FOR ALL HALF-HEIGHT / $115 ALL FULL-HEIGHT ▲

Your Business Solution Provider

T-Zone Opera Internet Solutions

•Comprehensive Service
•Minimal Investment
•Easy to Install & Manage

1.Built-In
- •Email Server
- •Web-Hosting
- •Web Access (Proxy)
- •Firewall
- •Modem
- •Ethernet Port
- •File Sharing
- •Easy Administration

2. Speed from 33.6 up to T1
3. Includes everyting needed to have Email and Internet Access for as a few as 5 and as many as 200 users.
4. Support 33.6K, 56K and ISDN Modem
5 Workstation Compatibility
- •IBM-PC or compatible running Windows 3.1x, Windows 95/NT
- •Apple Macintosh
- •Network Computers
- •UNIX Workstation
- •The Initail Setup requires a Windows 95/NT Computer

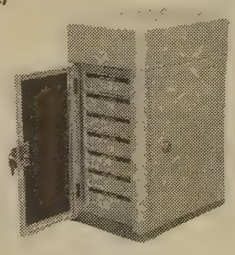
Starting at
$999

Mixed Media™ Server 3000 Thin Server

The Only Plug & Play Mixed Media Server

The easy way to manage and access anywhere on your network & Web Site.

The easy way to manage and access media anywhere on your network and Web Site Support CD ROM, Hard Disk, Jazz, & Zip.



- •User can share data and application across the network
- •Just attach and access
- •Access to all media files simotaneously across the Network
- •Sucurity of your Media
- •Fastest Access to your Media, 100 Base T
- •Completely self Contained
- •No SCSI Cards to configure
- •No Server hardware to Purchase
- •Available in 7/14/28/56 Bay Configurations

Starting at
$1999

T-Zone CR II System

- •Intel 440LX Chipset Motherboard, w/4 PCI, 3 ISA, 4 DIMM, 1 AGP Slots
- •Pentium® II Processor w/Fan & Heatsink
- •64MB SDRAM 168Pin (Upgrade to 128MB $110)
- •Deluxe Medium Tower ATX Case w/250W PS
- •1.44 Floppy Drive
- •6.4GB Ultra DMA Hard Drive
- •34X CD-ROM Drive
- •4MB AGP Video Card w/Cirrus Logic L3D Graphics Engine
- •16 Bit PnP Sound Card
- •80W Stereo Speakers
- •56K Int Fax Modem w/Voice
- •Microsoft Compatible PS/2 Mouse
- •Microsoft Win 95 Operating System, w/Manual

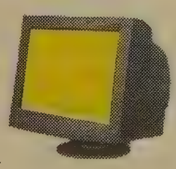
Pentium® II 233	$1088
Pentium® II 266	$1133
Pentium® II 300	$1269
Pentium® II 400	$1763

T-Zone CR I System

- •Pentium® Motherboard, w/4 PCI, 3 ISA, 2 DIMM Slots
- •512K L2 Cache
- •CPU with Fan & Heatsink
- •32MB SDRAM 168Pin (Upgrade to 128MB $110)
- •Deluxe Medium Tower Case w/250W PS
- •1.44 Floppy Drive
- •2.1GB Ultra DMA Hard Drive
- •24X CD-ROM Drive
- •64 Bit S3 Virge/DX Graphics/Video Card w/4MB
- •16 Bit PnP Sound Card w/Yamaha Chipset
- •Stereo Speakers
- •33.6K Int Fax Modem w/Voice
- •Windows 95 Keyboard
- •Microsoft Compatible PS/2 Mouse
- •Microsoft Win 95 Operating System, w/Manual

IBM 233Mhz	$677
AMD K6-233MHz	$710
Intel Pentium® 233Mhz	$753
AMD K6 266Mhz	$793

TeleVideo
SVP260
- •17" 16" viewing area
- •.25mm Aperture Grille pitch
- •1600x1200 Max Res. @ 65Hz
- •24-82Khz horizontal frequency
- •One-Touch OSD with digital Controls
- •Ergonomic Design

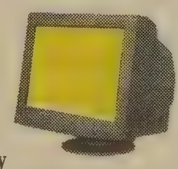


MSRP
$499

TeleVideo
SVP300
- •19" 18" viewing area
- •.26mm Aperture Grille pitch
- •1600x1200 Max Res. @ 75Hz
- •39-95Khz horizontal frequency
- •50-150Hz Vertical frequency
- •One-Touch OSD with digital Controls
- •21" features with a 17" footprint
- •3 Year Warranty

MSRP
$729

TeleVideo
SV200
- •17" 16" viewing area
- •.28mm Aperture Grille pitch
- •1200x1024 Max Res. @ 65Hz
- •30-70Khz horizontal frequency
- •50-120Hz Vertical frequency
- •OSD withkeylock features
- •17" features with a 14" footprint
- •3 Year Warranty



MSRP
$359

T-Zone Corporate & Research, Inc.

SUNNYVALE
Tel: 408-733-7070
Fax: 408-733-7770

HAYWARD
Tel: 510-733-0103
Fax: 510-733-0206

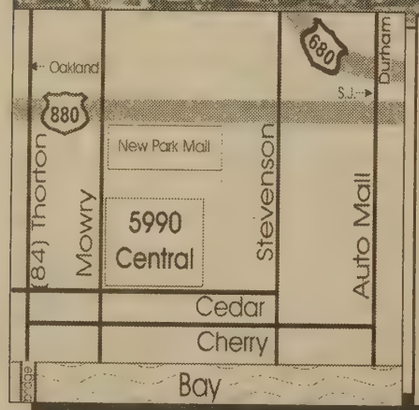
www.tzonedirect.com

CENTRAL
COMPUTER SYSTEMS, INC.

WIDE SELECTION AT LOW PRICES

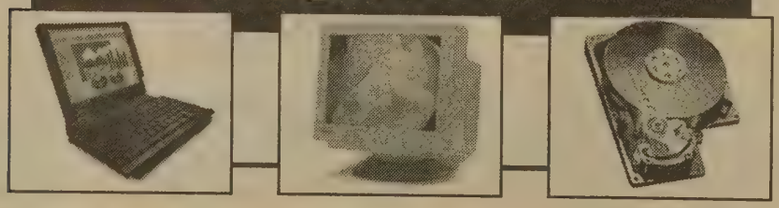
Santa Clara	SF	Newark
(408) 248-5888	(415) 495-5888	(510) 793-5555

VISIT OUR 3rd NEW LOCATION IN NEWARK



NEWARK
5990 Mowry Ave.
Newark, CA 94560
TEL: (510) 793-5555
FAX: (510) 795-7888

Check out the Spring Specials in Our 10-Page Ad
Pages 60-69



MICROTIMES™
Quotation Hotline

The Free, Convenient And Easy way To Receive Pricing Quotations On All Your Computer Needs!

To accurately process your quotation request, please print like the example below, without touching the box sides.	Please do NOT use a cover sheet. Only legible and completed forms can be processed. You may make copies of this form for multiple requests as needed. Fax forms to: (800) 496-8008 Please shade circles like this > ● and NOT with check or crossed marks > ✓ ✗

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

0 1 2 3 4 5 6 7 8 9

To ensure accuracy, please read the following information and instructions:

1. All requests for quotation must use the form attached so that the Optical Reading software (OCR) can read it accurately. Do not send requests for quotation on your own letterhead because the software will not read any other text except for the text areas provided in the form.

2. Please fill in all the information legibly. By filling in the boxes neatly and legibly our OCR software can read your requests for quotation accurately. This will also ensure that your request is easier for advertisers to respond to your needs.

3. Do not cut inside the dotted line. Do not use a cover sheet.

4. If you are asking for multiple systems and/or computer products in the same category but with different specifications, please use additional forms. This will ensure that your requests for quotation will be responded to accurately and without any confusion from *MicroTimes* advertisers.

5. Be familiar with the particular computer products you are interested in. Be specific about the various products, system processors, speeds, hard drive sizes, features, as well as the particular configuration that you are interested in. This will ensure that you get an accurate response.

COMPUTER SHOPPING MADE EASY
The MicroTimes Quotation Hotline:

Whether you work for a large corporation or are buying for your personal use, the MicroTimes Quotation Hotline can help you gather pricing ***Information Quickly, Easily and for Free*** from a wide variety of computer resellers through the support of MicroTimes magazine.

Just fill out the form on the opposite page so you can receive information directly from our advertisers on the exact computer products you are interested in. Our advertisers will respond to your requests directly by fax, phone, mail, or e-mail...whichever way you choose.

When You're Finished, Please Fax The Completed Form To:

1-800-496-8008

MICROTIMES Quotation Hotline

MicroTimes *Quotation Hotline* Fax forms to: 1-800-496-8008

1237

DIRECTIONS: Please Do Not Use A Cover Sheet. Only legible and accurate forms can be processed. You may make copies of this form for multiple requests. Copy at 100% of actual size, do not reduce in size. Blacken any circles that apply and print neatly within the boxes.

First Name | Last Name

Number of Employees: ○ 1 to 10 ○ 10 to 50 ○ 50 to 100 ○ Over 100

Company Name | Title

What Is Your Purchase Time Frame? ○ 1 Week ○ 3 Weeks ○ 2 Weeks ○ 4 Weeks

Address: Enter your complete mailing address if you want to receive the Advertiser's quotations via postal mail.

Please Rank Your Choice H=High L=Low
(H) (L) Price (H) (L) Service (H) (L) Reseller (H) (L) Warranty (H) (L) Onsite Support (H) (L) Compatibles (H) (L) Brand Name

City | State | Zip Code

Area Code Phone Number: Enter only if you want to receive quotes via phone. - -

Area Code Fax Number: Enter only if you want to receive quotes via fax - -

To Be Used Where ? ○ Business ○ Home ○ Network

E-Mail Address: Enter only if you want to receive the Advertiser's quotaions via email.

E-mail address (continued)

I Would Like To Receive My Quotations By: ○ Fax ○ Phone ○ E Mail ○ Mail

Enter # Of Requested Forms ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

"Advertisers' Quotation of the Day!" Your Shopping Made Easy. Our advertisers have packaged all your needs for one stop easy shopping. Blacken circles that apply like this---> ●

STEP ONE: PICK A SYSTEM.
○ PC NAME BRAND ○ MACINTOSH
○ PC COMPATIBLE ○ Network WORKSTATION
○ PC NOTEBOOK ○ Network FILESERVER
○ MACINTOSH NOTEBOOK

PICK YOUR PREFERENCES
○ Name Brand
○ Compatibles
○ No Preference

Step 1: Enter PC System Brand Name & Model #, If Preference

Step 1: Enter NoteBook Brand Name & Model #, If Preference

Quantity / Choices ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ 10 or More ○

My budget is: ○ Under $1000 ○ $1000 to $1999 ○ $2000 to $2999 ○ $3000 to $3999 ○ $4000 to $4999 ○ Over $5000

Call Me For A More Detailed Quote. ○ Quote Me For Selected Upgrade/Peripherals Choices Only. ○

STEP TWO: SYSTEM CONFIGURATION: ○ INTEL ○ PENTIUM ○ PENTIUM MMX ○ PENTIUM PRO ○ PENTIUM II ○ DUAL CPU'S ○ MACINTOSH ○ MACPOWER BOOK ○ MacCLONE ○ AMD ○ CYRIX

CPU MHz & SPEED: ○ 400 ○ 333 ○ 5X86 ○ 300 ○ 6X86 ○ 266 ○ PowerPC ○ 233 ○ K-6 ○ 200 ○ 166

BUS TYPE: ○ PCI ○ ISA

CACHE: ○ 64K ○ 128K ○ 256K ○ 512K

RAM: ○ EDO ○ SRAM ○ 4MB ○ 8MB ○ 16MB ○ 32MB ○ 64MB ○ 128MB

MONITOR: ○ SVGA ○ VGA ○ MONO ○ 26 DPI ○ 15" ○ 17" ○ Non Interlace ○ 28 DPI ○ 20" ○ 21" ○ Multisync

HARD DISK DRIVE: ○ IDE ○ SCSI ○ ZIP DR ○ JAZZ ○ 1GB+ ○ 2GB+ ○ 2.5GB+ ○ 3GB+ ○ 4GB+ ○ 6GB+ ○ 8GB+

FLOPPY DRIVE: ○ 1.44MB

FAX MODEM: ○ Internal ○ External ○ 33600bps ○ 56000bps

CASE TYPE: ○ Mid Tower ○ Desktop ○ Full Tower

VIDEO CARD RAM ○ 1MB ○ 2MB ○ 3MB ○ 4MB ○ 8MB

POINTING INPUT DEVICES: ○ Any Mouse ○ MS Mouse ○ Keyboard ○ Serial ○ Bus ○ PS2 ○ Trackball ○ Joystick ○ Ball Point ○ Pen

OPERATING SYSTEM NEEDED: ○ Windows 95 ○ OS2/Warp ○ Mac ○ Win NT ○ UNIX

STEP THREE: MULTIMEDIA UPGRADE ○ Please Add To Step 1 & 2 Quotation ○ Please Quote Me Separately

CD ROM DRIVE: ○ Internal ○ External ○ IDE ○ SCSI
CD ROM TITLES INCLUDED: ○ 1-5 ○ 5-10 ○ 11+
○ 32X ○ 24X ○ 20X ○ 16X ○ 12X
○ BRAND NAME ○ No Brand Name Preference
CD ROM Brand Name and Model Number

SOUND CARD ○ 64Bit ○ 32Bit ○ 16Bit

SPEAKERS ○ Less Than 25W ○ 25 to 50W ○ 50 to 75W ○ More Than 75W

STEP FOUR: NOTEBOOK SECTION - Please Note You Must Make Choices In Steps 1 & 2 To Complete Step 4

SCREEN TYPE: ○ 10" ○ 11' ○ 12' ○ Active Color ○ Dual Scan ○ 13'

PCMCIA SLOT: ○ Type II ○ Type III ○ Type IV

○ Audio Capable ○ Docking Station ○ Extra Battery ○ Fax Modem ○ CD\MultiMedia

STEP FIVE: NETWORKING NEEDS: ○ Please Contact Me on My Networking Needs Indicated Below
○ Software ○ Hardware ○ Consultation ○ Design ○ Installation ○ Administration ○ MS Workgroups
○ Users 2 to 10 ○ Users 10 to 50 ○ Users Over 50 ○ Lantastic ○ Apple Talk ○ Novell ○ MS NT

1237

STEP SIX: UPGRADES & PERIPHERALS: ○ Ink Jet Printer ○ Tape Backup ○ Accelerator ○ Digitizer ○ Laser Printer ○ Color Printer ○ Dot Matrix Printer ○ Flat Bed Scanner ○ Hand Scanner

Paperimage (R), Inc. 1994-1998 Copyright All rights reserved. (NoCal Form J 04/26/1998)

Please Cut Out Form On Dotted Line...Do Not Enlarge or Reduce Size of Form

QUOTATION HOTLINE

CHICOTEC

Your Complete PC Center

DUAL PENTIUM® II SUPER SERVER

- Intel Dakota DK440LX Dual Pentium II M.B.
- Two Intel Pentium II 300MHZ CPU & Fan
- 256MB SDRAM 168P DIMM
- Integrated PCI Ultra Wide SCSI Controller
- 4.5GB Ultra-Wide SCSI Hard Disk Drive
- Super Server Tower Case ATX
- 9 Front Accessible Internal 5-1/4" HH.Bays
- 2 Internal 5-1/4" H.H.Bays
- Triple Fan Air Ventilation
- Two Redundant Hot-Swap
- Pluggable Power Supply
- Maxi-Switch PS/2 Mouse
- 1.44MB Teac Floppy Drive
- Integrated Sound Device
- Matrox Millennium AGP 4MB WRAM
- Toshiba 32 x SCSI CD ROM
- 60W Amplified Speakers
- Microsoft Windows NT 4.0 Workstation

Powerful Dual Pentium II

Dual Pentium II 300MHz $3810

Dual Pentium II-333 ..... $4255

PENTIUM® II POWER STATION

- Intel Atlanta AL 440LX Motherboard
- Intel Pentium II 233MHz CPU & Fan
- 32MB SDRAM Memory
- ATX Mid Tower Case w/230W Power Supply
- Maxi-Switch PS/2 Keyboard
- Microsoft PS/2 Mouse
- Diamond Stealth 3D PRO PCI 2MB Video Card
- 1.44MB Teac Floppy Drive
- 4.3GB EIDE Hard Drive
- Integrated Sound Device
- 24X CD-Rom
- 60W Amplified Speakers
- Microsoft Windows 95
- 17" Impression SVGA Monitor add $395

Pentium II 233MHz $1135

Pentium II-266 ..... $1235
Pentium II-300 ..... $1395

PENTIUM® MULTIMEDIA SYSTEM

- Intel 430TX Chipset Motherboard
- Intel Pentium 166MHZ MMX CPU & Fan
- 32MB 72Pin EDO Memory 512K Cache
- Mini Tower Case w/230W Power Supply
- 104 Win95 Keyboard
- Microsoft Mouse
- Trident 9680 PCI 2MB Dram SVGA Card
- 1.44MB Floopy Drive
- 2.6GB EIDE Hard Drive
- 24X CD-Rom
- ESS 16Bit PNP Sound Card
- 60W Amplified Speakers
- Microsoft Windows 95
- 14" Impression SVGA Monitor add $165

Pentium II 166MHz $708

Pentium 200 MMX $728
Pentium 233 MMX $809

SERVICE CENTER

- System Repair
- All Brand PC and Compatibles
- No Appointment required
- Free Estimates
- Fast Turnaround Service
- System upgrade
- Hard disk, Memory, CPU, Video Card
- Motherboard, CD ROM, Sound Card, Speaker, Monitor
- Custom Configuration

Please Call, Fax or E-Mail for Quotes

NETWORK & COMMUNICATION

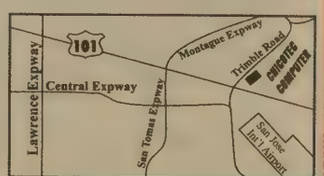
- Hardware & Software
- Novell Netware
- Network Design
- Windows NT
- Installation
- Cabling
- Maintenance
- Service Contract

Novell Certified NetWare Engineer

- Free onsite Consulting & Quotes

3C 509B TPO OEM .....@55
3C 509B Combo.....@81
3C 900 PCI TPO OEM .....@73
3C 900 PCI Combo OEM.....@91
3C 905 TX PCI 10/100 TP ..@79
CNET 200E/200C Combo..@33/@32

Tel: (408)954-8998
Fax: (408)954-1135 Mon - Fri: 9am - 6pm
542 West Trimble Road, San Jose, CA 95131
E-mail: chicotec@ix.netcom.com
www.chicotec.com



Logos and trademarks belong to their respective owners. Not responsible for typographical errors.

continued from page 50

for relief, because their house is so incredibly crowded. "Bring in the cows," says the chief, and when the family returns after a week to complain that this remedy has only made the situation far worse, he adds "bring in the goats." After several more weeks of having the obedient but hard-pressed family continually sharing their ever-more-limited living space with their pigs, their chickens, and their rabbits, the village chieftain finally gives the word for them to shoo all their animals back outdoors. "Amazing," crows the family, in pleased disbelief. "We don't know how you did it, but now our house is so large we don't know what to do with all the extra space!"

If only half a company's workforce telecommutes just one day-a-week, the company can instantly trim their office space requirementsby 10%! And the savings fall right to the bottom line.

This is not to suggest, of course, that office-bound workers should start sharing their spaces with farm animals. But it does offer a new perspective on why employers may be cutting back on their facilities expenditures. Not only are they gearing up (or down, in this case) to anticipate the savings that will come with increased use of telecommuting among their workforces, but they are creating an atmosphere that adds one more advantage to working from home compared with working in the traditional office. It doesn't take a rocket scientist to calculate that even the smallest extra bedroom can seem extravagantly spacious when compared with a 42 sq. ft. cubicle.

Union Involvement In Telecommuting

A recent study by Margaret A. Klayton, M.B.A., Ph.D., an Assistant Professor of Business at Mary Washington College in Fredericksburg, VA, has found that union involvement in telecommuting is strong, and growing. Nearly half the unions responding to the survey report they are involved in establishing telecommuting programs.

According to Dr. Klayton, unions have traditionally been against home-based work because of the potential for abuse of worker's rights. However, they now appear to be actively supporting telecommuting programs. She writes: "The union attitude expressed appears to have integrated telecommuting into the normal workforce representation model or paradigm. Part of the change in attitude may also be due to most major organizations including unions in the decision process of developing telecommuter programs."

Her survey reveals that:

• Management's most popular methods for controlling and monitoring union members' performance while they are telecommuting include Management by Objectives, submission of periodic reports on progress, and the use of detailed work plans.

SERVING THE BAY AREA SINCE 1986

Now Hiring Sales People

COMP EXPRESS

YOUR LOCAL COMPUTER SUPERSTORE

Now Hiring Service Technicians

PC-EXPRESS Eagle II System

- Intel Pentium® II Processor w/MMX Technology™
- Intel 440LX AGP Chipset w/3ISA 4PCI, 1AGP Slot
- 32MB SDRAM/512K Cache
- 4.3GB Hard Drive Ultra DMA
- 1.44MB 3.5" Sony Floppy Drive
- Trident Graphics Card w/4MB
- 56K Flex Modem/Fax/Voice
- 24X Toshiba CD-ROM
- 32-Bit Sound Card Wavetable
- 60 Watt Speakers
- Win95 Enhanced Keyboard
- 2-Button Mouse
- ATX Mid-Tower Case
- Windows 95 on CD with Registration
- Monitor Sold Separately

$899

Pentium® II 233MHz.....$899
Pentium® II 266MHz.....$999
Pentium® II 300MHz 6.4GB $1299
Pentium® II 333MHz 8.4GB $1499

Primax
Full Page Sheet Fed Color Scanner
$49.99

PC-EXPRESS Hawk System

- Intel Pentium® Processor w/MMX Technology™
- Intel TX Chipset w/4 ISA, 4 PCI
- 32MB SDRAM/512K Cache
- 2.1GB Hard Drive Ultra DMA
- 1.44MB 3.5" Sony Floppy Drive
- Trident 3D Graphics Card w/4MB
- 56K Flex Modem/Fax/Voice
- 24X Toshiba CD-ROM
- STB Soundrage 32 Sound Card
- 60 Watt Speakers
- Win95 Enhanced Keyboard
- 2-Button Mouse
- ATX Mid-Tower Case
- Windows 95 on CD with Registration
- Monitor Sold Separately

$699

Pentium® 200MHz$699
Pentium® 233MHz$749

3F PhotoMaker
ColorFlat Bed Scanner
$69.99

FM Radio Card ISA
$9.99

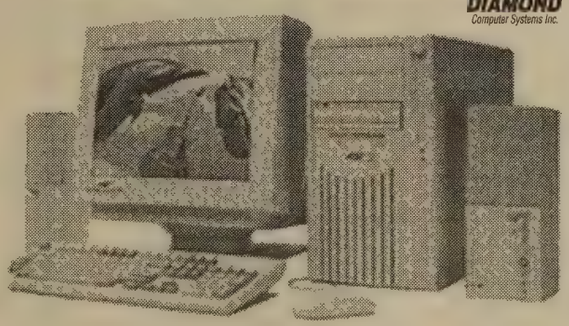
1 Year Warranty Parts & Labor

TOSHIBA

Money Back Guarantee

US Robotics
The Intelligent Choice in Data Communications

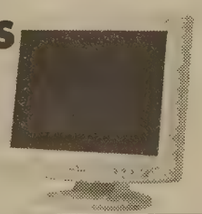
DIAMOND
Computer Systems Inc.



PRINTERS

Hewlett Packard
DeskJet 670C 600x300 . . . . . $199
DeskJet 890CXi 600x300 . . . . . $399
LaserJet 6LXi 600dpi $389
EPSON
Stylus 400 Inkjet 720x720 . . . . . $199
Stylus 800 Inkjet 1440x720 . . . . . $375
NEC
Model 150C SuperScript InkJet/Color $129
OKIDATA
OKi Model 4W $199

MONITORS



Sony 17" 200ES SVGA Color $579
Sony 17" 200GS SVGA Color $629
NEC 17" A700 SVGA Color $499
NEC 17" M700 .25 SVGA Color . $CALL
Smile 17" .28 SVGA Color. $349
AOC 17" .26 SVGA Color $349

PC-EXPRESS Phantom II

- Intel Pentium® II Processor w/MMX Technology™
- Intel 440LX AGPset/512K L2 Cache
- 64MB SDRAM (10ns)
- 8.4GB Ultra ATA Hard Drive
- 1.44MB 3.5" Sony Floppy Drive
- 3D Graphics Card w/4MB
- Matrox Millennium II 3D 8MB AGP
- 56K Flex Modem/Fax/Voice
- 2 USB 16550, 2 Serial & 1 Parallel port
- 32X Toshiba CD-ROM
- 32-Bit Sound Card with Wavetable
- 60 Watt Speakers
- Win95 Enhanced Keyboard
- Microsoft IntelliMouse
- ATX Mid-Tower Case
- Windows 95 on CD with Registration
- Monitor Sold Separately

$1549

Pentium® II 300MHz.....$1549
Pentium® II 333MHz.....$1699

Express TV
TV/Video Capture Card
$49.99

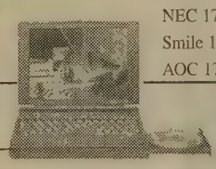
PC-EXPRESS Tsunami

- 400MHZ Pentium II w/MMX Technology
- A bit BX-6 Motherboard
- 100MHz bus clock
- Intel BX Chipset w/3 ISA, 4 PCI, 1 AGP
- 64MG SDRAM
- 8.4GB Hard Disk Drive
- 1.44MB 3.5" Floppy Drive
- Diamond 4MB AGP Video Card
- USR X2 Modem
- 32X Toshiba CD-ROM
- Sound Blaster AWE-64 Sound Card
- 2 USB 16550, Serial & 1 Parallel Port
- Windows 95 Enhanced Keyboard
- Microsoft IntelliMouse
- Windows 95 on CD w/Registration
- Mid-Tower ATX Case
- Monitor Sold Separately

$1899

NOTEBOOKS

New NEC Versa®
Starting at $1299



2730MT P133MMX 16MB / 2.0GB / 16X / 12.1TFT $1299
2760M P166MMX 32MB / 2.0GB / 16X / 12.1DSTN $1399
6200B18 P166MMX 32MB / 2.0GB / 10X / 13.3XGA $1899
6200B18 P166MMX 16MB / 3.0GB / 10X / 13.3XGA $1999
Toshiba 445CDX Pentium 133MMX 16MB / 1.6GB / 10X / 12.IDSTN refrb $1149
Compaq Elite 486DX4-75 16/500HD Active, Refurb, 90-day Warranty . . $599
DFI Pentium 150MHz 16MB / 1.4GB / 10X / 12.1TFT refrb $1199
Executive Plus Pentium 200MMX 32MB / 2.1GB / 20X / 12.1TFT new $1899
Texas Instruments 610CDT Pentium 150 16MB / 1.4GB / 10X / 11.3TFT new $1249
Daewoo Pentium 166MMX 16MB / 1.4GB / 10X / 12.1 TFT new $1399

38495 Fremont Blvd. Fremont CA 94536 (510) 739-1000
Regular Business Hours: M-F 9am-6pm Saturday 11am-5pm

7-day money-back guarantee onselected products LSS S+H. Prices & availability subject to change without notice. Not responsible for typographical errors. Mention ad to get prices. All trademarks of their respective companies.

• The preferred method of providing a safe home office for telecommuters is to allow for home inspections by company representatives.

• Employers are held responsible for accidents while telecommuters are working at home in the same ways they are held responsible for accidents that happen in centralized offices. Fewer than 15% of the employers who responded to this survey expect work-period accidents in the home to be covered by the employee's own homeowner's or renter's insurance.

Attention: Telecommuting Lawyers

Some time ago, I mentioned in this space that the "Women in the Profession" Committee of the Young Lawyers Division of the American Bar Association was trying to learn more about lawyers who telecommute. Their goal was not only to develop a model telecommuting policy for legal employers, but also to create a book that would make it easier for more lawyers to win the right to telecommute, and for more law firms to encourage their lawyers to work without so much physical travel.

Participation in the study exceeded expectations, and the result is now in print. It's called *Telecommuting For Lawyers*, and it's a 150+ page softcover book put out by the American Bar Association's Law Practice Management Section. The author, Nicole Belson Goluboff, herself a telecommuting lawyer, covers in plentiful detail ways to overcome all the troubling obstacles and organizational stumbling blocks that might otherwise impede the progress of the nation's law firms down the road toward more telecommuting by more lawyers.

It doesn't take a rocket scientist to calculate that even the smallest extra bedroom can seem extravagantly spacious when compared with a 42 sq. foot cubicle.

The book details why lawyers and law firms should move toward telecommuting, how they can most easily and most effectively put telecommuting ideas and techniques into practice, and a variety of useful resources, such as telecommuting survey forms and a detailed discussion of what a telecommuting policy ought to cover.

Lawyers who participated will probably want to contact Ms. Goluboff, c/o of the American Bar Association, for feedback on the project. Anyone who wants a copy of the book, priced at $49.95, can order from the ABA at 750 N. Lake Shore Dr., Chicago, IL 60611. The book can also be ordered through the ABA's Web site at: *www.abanet.org/lpm/catalog*.

continued on page 188

MONTHLY SPECIALS
(while supplies last)

120 WATT Speakers $6
104 Mitsumi Keyboard $7
ESS Sound w/wave table $7
Pentium 256K m/b & Intel P-133 CPU . . $95
486 m/b w/12mb Memory & DX2/66 CPU . . $60
Pentium m/b w/512K cache up to 166MHz. . $25
1MB PCI Video (Creative Lab Video) . . . $14

MOTHERBOARDS

Pentium® II 440 Ultra DMA 1 AGP Slot $95
TXPII Chipset w/512K/up to 233MHz w/ sound & Video . . $70
VX Chipset w/512K Cache/up to 233MHz $53
ABIT TX Chipset/Jumperless/512K w/Video. $75
TX Chipset/512K/up to 233MHz $75

BASIC SYSTEM
• Mini Tower Case
• TX Pro II Chipset Motherboard w/512K cache
• IBM 200
• 586 Cooling Fan
• 16MB EDO Ram
• Video On Board
• 2.1 Gigabyte HDD
• 1.44 Sony FDD
• 16 Bit Sound On Board
• 8X CD-ROM
• 33.6 Fax/Modem w/voice
• 3 button mouse
• 104-key Win 95 Compatible Keyboard
• 60 watt speakers

$420

With the following CPU's...
Intel Pentium MMX 233/200/166 . $510/488/478
Cyrix MX 266/233/200 . . . . . $548/461/444
AMD K6 MX 266/233/200 . . . . . $549/471/466
AMD K5 166/100 . . . . . $453/441

HOME SYSTEM
• Mini Tower Case
• TX Pro II Chipset Motherboard w/512K cache
• 586 Cooling Fan
• 16MB EDO Ram
• Video On Board
• 2.1 Gigabyte HDD
• 1.44 Sony FDD
• 16 Bit Sound On Board
• 12X CD-ROM
• 33.6 Fax/Modem w/voice
• 3 button mouse
• 104-key Win 95 Compatible Keyboard
• 60 watt speakers

With the following CPU's...
Intel Pentium MMX 233/200/166 . $510/488/478
Cyrix MX 266/233/200. . . . . $548/461/444
AMD K6 MX 266/233/200. . . . . $549/471/466
AMD K5 166/100. . . . . $453/441

OFFICE SYSTEM
• Mini Tower Case
• TX Pro II Chipset Motherboard w/512K cache
• 586 Cooling Fan
• 32MB EDO Ram
• Video On Board
• 3.2 Gigabyte HDD
• 1.44 Sony FDD
• 16 Bit Sound On Board
• 24X CD-ROM
• 33.6 Fax/Modem w/voice
• 3 button mouse
• 104-key Win 95 Compatible Keyboard
• 60 watt speakers

With the following CPU's...
Intel Pentium MMX 233/200/166. . $546/524/514
Cyrix MX 266/233/200 . . . . . $584/497/480
AMD K6 MX 266/233/200 . . . . . $585/507/502
AMD K5 166/100 . . . . . $489/477

PENTIUM II SYSTEM
• Super Mini Tower
• Pentium II 440 LX
• Pentium II - 266MHz
• Pentium II Cooling Fan
• 32 MB SDRAM
• 3D 4MB A.G.P. Video
• 4.3 GB HDD
• 1.44 FDD
• 16BIT 3D Sound
• 24X CD-ROM
• 56.6K Fax Modem
• 3-Button Mouse
• 104 Key Win 95 Compatible Keyboard
• 60 Watt Speaker

$798

HARD DRIVE
2.1GB HD. $120
3.2GB HD. $132
4.3GB HD. $150
6.4GB HD. $195
8.4GB HD. $275

MEMORY
SIMM 72 Pin 16MB. . $20
SIMM 72 Pin 32MB. . $43
SIMM 72 Pin 64MB. . $89

DIMM 16MB 3D. . . . $21
DIMM 32MB $42
DIMM 64MB EDO . . $89
Intel CPU . . . . . Call
Cyrix CPU. . . . . Call
AMD CPU. . . . . Call

VIDEO CARD
PCI 1MB 32-Bit Cirrus Logic. $16

PCI 1MB 64-Bit S3 Virge. $16
PCI 2MB S3. . . . . $34
PCI 4MB S3 Virge . . $45
Diamond 1MB $39
Diamond 2MB $52
Diamond 4MB $60
Monster 4MB PCI . $153
VLB 1MB Cirrus Logic $17

SOUND CARD
16-Bit Opti $12
16-Bit Yamaha $13

MONITOR
14" 0.28 Monitor . . $118
15" 0.28 Monitor . . $150
17" 0.28 Monitor . . $269
17" 0.25 Monitor Sony. $560
17" 0.26 ViewSonic . $515

Mini Tower $21
Jumperless LED Setup

CD-ROM
12X $37
24X $47
24X Sony. $57
32X $58
Sony CDR 2X/8X. . $340

OTHER PRODUCTS
ISA Network Card. . . . $14
PCI Network Card. . . . $18
Video Camera. $135
Floppy Drive. $18
Mouse $5
80W Speakers $11
160W Speakers $19
240W Speakers $30

Pent. II 440LX m/b w/A.G.P. 4MB 3D Video & SIS Sound Pro $130

FOR-U-COMPUTER
765 Mabury Rd. • San Jose, CA 95133
Tel. (408) 437-8718 • Fax (408) 437-8719
Open M-F 10-6:30 • Sat 10-5
www.forucomputer.com
Check Out Our Web Site for Up-to-Date Sale Prices!
E-mail: LTC765@forucomputer.com
Prices subject to change without notice. Not responsible for typographical errors. Prices reflect cash purchases only.

THE MOBILE COMPUTING PROFESSIONALS

SALES - SERVICE - LEASING

SHOP AND COMPARE BEFORE YOU BUY!

FUTURE COMPUTING SOLUTIONS INCORPORATED

IBM

Model	Processor	Ram	HD	Screen	Price
ThinkPad 380ED	Pent-™/166 MMX	16MB	2.1GB+8-20X	12.1 FRSTN	$1523.
ThinkPad 380ED	Pent-™/166 MMX	16MB	3.0GB+8-20X	12.1 Active	$2189.
ThinkPad 380ED	Pent-™/166 MMX	16MB	5.1GB+8-20X	12.1 Active	$2380.
ThinkPad 380XD	Pent-™/233 MMX	32MB	3.2GB+10-24X	12.1 HPA	$1999.
ThinkPad 380XD	Pent-™/233 MMX	32MB	4.0GB+10-24X	12.1 Active	$2570.
ThinkPad 380XD	Pent-™/266 MMX	32MB	5.1GB+10-24X	12.1 Active	$2952.
ThinkPad 380XD	P-II/233 MMX	32MB	4.0GB+10-24X	12.1 HPA	$2665.
ThinkPad 380XD	P-II/266 MMX	32MB	5.1GB+10-24X	12.1 Active	$3714.
ThinkPad 560E	Pent-™/166 MMX	16MB	2.1GB	12.1 Active	$1910.
ThinkPad 560X	Pent-™/200 MMX	32MB	2.1GB	12.1 HPA	$2210.
ThinkPad 560X	Pent-™/233 MMX	32MB	4.0GB	12.1 Active	$2963.
ThinkPad 600	Pent-™/233 MMX	32MB	3.2GB+10-24X	13.3 HPA	$2867.
ThinkPad 600	Pent-™/233 MMX	32MB	3.2GB	12.1 TFT	$2675.
ThinkPad 600	P-II/233 MMX	32MB	3.2GB+10-24X	13.3 TFT	$3822.
ThinkPad 600	P-II/266 MMX	32MB	4.0GB+10-24X	13.3 TFT	$4396.
ThinkPad 770	Pent-™/233 MMX	32MB	4.0GB	13.3 Active	$3393.
ThinkPad 770	Pent-™/233 MMX	32MB	4.0GB	13.3 Active	$3446.
ThinkPad 770	Pent-™/200 MMX	32MB	3.2GB	13.3 Active	$2867.
ThinkPad 770	Pent-™/233 MMX	32MB	4.0GB	13.3 Active	$3383.
ThinkPad 770	Pent-™/233 MMX	32MB	5.1GB	14.1 Active	$4157.
ThinkPad 770	P-II/266 MMX	32MB	5.1GB	14.1 Active	$4301.
ThinkPad 770	P-II/266 MMX	32MB	5.1GB	14.1 Active	$4396.
ThinkPad 770	P-II/266 MMX	64MB	8.1GB	14.1 Active	$5543.

Think Pad

- *Up to 8.1 GB*
- *14.1 Active Color Display*

TECRA 780DVD $5???

TECRA 750CDM $4???

SATELLITE PRO 490CDT $3???

TOSHIBA

In Touch with Tomorrow

Win95 INSTALLED

Model	Processor	Ram	HD	Screen	Price
50CT	Pentium™75	16MB	772MB	6.1 AMC	$678.
70CT	Pentium™ 120MMX	16MB	1.58GB	6.1 AMC	$1624.
100CT	Pentium™ 166MMX	32MB	2.02GB	7.1 AMC	$2399.
100CT-NT	Pentium™ 166MMX	32MB	2.02GB	7.1 AMC	$2590.
220CDS	Pentium™133	16MB	1.34GB+10X	12.1 Dual Scan	$1310.
430CDT	Pentium™120	16MB	1.2GB+10X	11.3 AMC	$1624.
440CDX	Pentium™ 133MMX	16MB	1.34GB+10X	12.1 Fast Scan	$1290.
440CDT	Pentium™ 133MMX	16MB	1.34GB+10X	12.1 AMC	$1624.
460CDX	Pentium™ 166MMX	32MB	2.02GB+10X	12.1 Fast Scan	$1534.
470CDT	Pentium™ 200MMX	32MB	2.02GB+10X	12.1 AMC	$2398.
480CDT	Pentium™ 233MMX	32MB	3.82GB+10X	12.1 AMC	$2590.
490CDT	Pent-II 233MMX	32MB	3.82GB+20X	12.1 AMC	$3395.
490XCDT	Pent-II 266MMX	32MB	3.82GB+20X	13.3 AMC	$3826.
490CDT-NT	Pent-II 233MMX	32MB	3.82GB+20X	12.1 AMC	$3587.
490XCDT-NT	Pent-II 266MMX	32MB	3.82GB+20X	13.3 AMC	$4017.
300CT	Pentium™ 133MMX	32MB	1.51GB	10.4 AMC	$1456.
300CT	Pentium™ 133MMX		3.87GB	10.4 AMC	$1650.
320CT	Pentium™ 266MMX	32MB	3.87GB	10.4 AMC	$3167.
510CDT	Pentium™ 133MMX	16MB	2.02GB+10X	12.1 AMC	$1399.
520CDT	Pentium™ 166MMX	32MB	2.02GB+10X	12.1 AMC	$2206.
520CDT	Pentium™ 166MMX	32MB	3.87GB+10X	12.1 AMC	$2398.
530CDT	Pentium™-166MMX	32MB	2.02GB+10X	12.1 AMC	$2868.
530CDT	Pentium™ 166MMX	32MB	3.87GB+10X	12.1 AMC	$3078.
550CDT	Pentium™ 266MMX	32MB	3.82GB+20X	12.1 AMC	$3824.
730XCDT	Pentium™ 150MMX	16MB	2.1GB+6X	12.1 AMC	$1451.
740CDT	Pentium™ 166MMX	16MB	3.0GB+10X	13.3 AMC	$2628.
750CDM	Pentium™ 233MMX	32MB	4.77GB+20X	13.3 AMC	$4781.
750CDM-NT	Pentium™ 233MMX	32MB	4.77GB+20X	13.3 AMC	$4972.
750DVD	Pentium™ 233MMX	64MB	4.77GB+DVD	13.3 AMC	$5162.
780CDM	Pent-II 266MMX	64MB	5.1GB+20X	13.3 AMC	$4878.
780DVD	Pent-II 266MMX	64MB	5.1GB+DVD	13.3 AMC	$5262.
780CDM-8.1	Pent-II 266MMX	64MB	8.1GB+20X	13.3 AMC	$5262.
780DVD-8.1	Pent-II 266MMX	64MB	8.1GB+DVD	13.3 AMC	$5644.
780CDM-NT	Pent-II 266MMX	64MB	5.1GB+20X	13.3 AMC	$5069.

COMPAQ Laptops

Model	Processor	Ram	HD	Screen/OS	Price
1592DMT	P/233MMX	32/96MB	3.2GB+20X	12.1" Active Clr	$2998.
1540DM	P/150MMX	16/80MB	2.1GB+20X	12.1"Dual Scan	$1758.
4160T	P/166MMX	16/80MB	2.0GB	12.1"Dual Scan	$2318.
4210T	P/233MMX	32/96MB	3.2GB	12.1" Active Clr	$3198.
4220T	P/266MMX	32/96MB	4.0GB	12.1" Active Clr	$3648.
4160TSL	P/166MMX	16/80MB	2.0GB	12.1" Active Clr	$2278.
7330T	P/150MMX	16/128MB	2.1GB	12.1" Active Clr	$1388.
7350MT	P/166MMX	32/128MB	2.1GB	12.1" Active Clr	$2738.
7360DMT	P/200MMX	32/128MB	3.0GB+20X	12.1" Active Clr	$3198.
7370DMT	P/233MMX	32/128MB	4.0GB+20X	12.1" Active Clr	$3998.
7380DMT	P/266MMX	32/128MB	4.0GB+20X	12.1" Active Clr	$4288.
7380NT	P/266MMX	32/128MB	4.0GB+20X	12.1" Active Clr	$4378.
7730MT	P/166MMX	32/144MB	2.1GB	12.1" Active Clr	$3198.
7750MT	P/166MMX	32/144MB	3.0GB	12.1" Active Clr	$3198.
7770DMT	P/233MMX	32/144MB	3.0GB+20X	12.1" Active Clr	$3648.
7792DMT	P/266MMX	32/144MB	5.0GB+20X	13.3" Active Clr	$4838.
7792NT	P/266MMX	32/144MB	5.0GB+20X	13.3" Active Clr	$4928.
7790DMT	P/233MMX	32/144MB	5.0GB+20X	13.1" Active Clr	$4558.

COMPAQ Desktops

DP-2000	Pent-™/166MMX	16MB	2.1GB	W95	$788
DP-2000	Pent-™/166MMX	16MB	3.2GB	W95	$798
DP-2000	Pent-™/200MMX	16MB	2.1GB	W95	$855
DP-2000	Pent-™/200MMX	32MB	3.2GB	W95	$942
DP-2000	Pent-™/233MMX	32MB	3.2GB+16X	W95	$1128

SERVICE

Let our "Computer Doctors" diagnose and repair your desktops or notebooks.

If we can't fix it, no one can!!

Authorized Premier Service Provider TOSHIBA

Factory authorized service center for:

Toshiba*
(*Premier Service Provider),
HP,Compaq ,AST ,Zenith, Apple

TOSHIBA 510CDT $1398

Pent-133MMX,16MB Ram,2.02GB HD, 10X CD-ROM, 1.44MB FDD, 256K Cache, 12.1" Act. Color, 2MB Video RAM, 28.8kbps fax/modem w/answering machine, 3 YRS parts & 1 YR labor

TOSHIBA 730XCDT $1498

Pent-150MMX, 16MB Ram, 2.02GB HD, 10X CD-ROM, 1.44MB FDD, 256K Cache, 12.1" Act. Color, 2MB Video RAM, 28.8kbps fax/modem w/answering machine, 3 YRS parts & 1 YR labor

HARD DRIVE UPGRADES

Manufacturer	1.4 GB	2.1GB	3.0GB
Toshiba*	$378.	$548.	$848.
Compaq*	$378.	$548.	$848.
IBM*	$378.	$548.	$848.

*Most Models

for Toshiba, Compaq, IBM, NEC, TI and other Laptops
Memory for Toshiba Tecra 710/720/730/740

64MB $698 128MB $998

C.O.D. Cashiers Checks

Written authorization required on all credit cards for verification.
We report to police for stolen cards

LOW, LOW PRICES

Future Computing Solutions, Inc.

"In Touch With Your Computing Needs."

Northern California • Alameda, CA 94502

Future Computing Solutions, Inc. Internet Address:www.FCSinet.com

(510) 337-9034 OR (510) 337-9036 FAX

Policy: Prices and availability subject to change without notice. All prices shown are after deducting 3% cash discount. For other forms of payment, 3% will be added to the price. We ship by U.P.S. Fedex, Dhl. NO returns without RMA. 20% restocking charge on returned items. All sales final. Not responsible for compatibility. We check for stolen credit cards. Not responsible for typing errors. All manufacturers warranties apply. Limited parts labor & warranties. All trademarks are registered trademarks of their respective companies.

Strange Days In Java Land

Hapless Continues His Quest For Enlightenment

By Bennett Falk

JavaOne, Hapless discovered somewhat belatedly, is arguably the world's largest software developers' conference, with somewhere in the neighborhood of fourteen to fifteen thousand attendees.

Our peripatetic friend Hapless imagines himself to be a technological nomad, a citizen of a high-tech world, at home anywhere. From his first accidental encounter with awk years ago, he has wandered from one technological trend to another on a quest whose true objective remains obscure.

He has dabbled with awk and perl and tcl. He has become enraptured with UNIX and fascinated with client/server gizmos. He has endured NT, Windows 95, and downsizing. He remains fond of the Internet even though he once predicted that the World Wide Web would never catch on. He is a jack of many trades and master of not much of anything.

And he has just returned from JavaOne.

JavaOne

JavaOne is the annual developers' conference hosted by JavaSoft, the wing of Sun Microsystems that is responsible for Java. Java is an object-oriented programming language developed at Sun a few years ago. (One of Hapless' cohorts, Stefan Gower, once declared Java to be "the Volvo of programming languages.")

Java was originally intended as a programming language for video appliances: Computers that sat between a home television and its connection to the cable TV network. Programming these appliances would make "video on demand" possible.

But even when "video on demand" was possible, it failed to capture the public's imagination.

A short time later, when the Internet and the Web did capture the public imagination, someone at Sun had the good sense to use Java to write small programs (applets) that could be delivered over the Internet and executed by Java-enabled browsers.

Java was rolled out to rave reviews at the Sunsoft Developers' Conference in 1995. (Hapless in fact was present at this conference, but the Java presentations were so crowded that he couldn't find a seat and stalked off to learn what he could about print spooling on Sun's Solaris operating system.)

In 1996, Java was big enough to warrant a conference of its own, and several of Hapless' friends attended the first JavaOne conference at the Moscone Center in San Francisco. They came back wide-eyed with evangelical fervor, and they babbled about Java-enabling everything from cellular phones to toaster ovens. Hapless was skeptical, but (still smarting from his misjudgment of the Web) cautiously so.

In 1997 the Moscone Center hosted the second Java Developers' Conference (inexplicably called JavaOne). Again returnees seemed strangely energized.

When the third Java Developers' Conference (also called JavaOne) was announced for March, 1998, Hapless resolved to attend.

Java Reality: You Know It's Gonna Get Stranger

JavaOne, Hapless discovered somewhat belatedly, is arguably the world's largest software developers' conference, with somewhere in the neighborhood of fourteen to fifteen thousand attendees.

The first thing Hapless noticed as he approached Moscone Center was graffiti on the sidewalk: Messages had been scrawled on the pavement in florescent orange chalk. Hapless assumed these were markings for the construction work that seemed to be underway everywhere until he caught a glimpse of the phrase "fastest VM!" in chalk dust at his feet.

VM is shorthand for Virtual Machine: The execution environment for Java. Sun, of course, makes a Java Virtual Machine that is part of the Java Developer's Kit. Other vendors, including Microsoft, are also licensed to make VMs for various platforms. When Hapless read the messages in orange chalk more fully, he realized that they were a kind of guerrilla marketing campaign touting the performance advantages of the Microsoft VM.

"Strange," Hapless thought.

Inside the conference, things were no less strange. The JavaOne logo was everywhere, a

continued on page 70

HOME STATION

- **Intel** Anchroge **430TX** System
- Intel Pentium CPU with Fan
- 512k Cache & Yamaha 16 Bit Sound
- Built-in EIDE & 16550 IO Ports
- Built-in EPP & Floppy I/F Ports
- 32MB 168pin SDRAM Dimm
- Teac 1.44MB Floppy Drive
- 4.3GB Ultra DMA IDE Hard Drive
- Toshiba 32X IDE CDROM
- Diamond 3D4000 PCI w./4MB
- 80W Pair of Speakers
- ATX Mini-Tower Case w/. PS
- MS PS/2 Mouse,104 Keytronics K/B
- MS Windows 95

<Please Call for Monitor>

Pentium 233MMX $860
Pentium 200MM.....$840
Pentium 166MMX $830
Pentium 166/133.....$810

OFFICE STATION

- **ASUS/Intel** Pentium II 440LX System
- Intel Pentium CPU with Fan
- 512k Cache
- Built-in EIDE & 16550 IO Ports
- Built-in EPP & Floppy I/F Ports
- 64MB 168 Pin SDRAM Dimm
- Teac 1.44MB Floppy Drive
- 4.3GB Ultra DMA IDE Hard Drive
- Toshiba 32X IDE CDROM
- Diamond 3D2000 PCI with 2MB
- ATX Mini-Tower Case w/. UL PS
- MS PS/2 Mouse, 104 Keytronics K/B
- 3COM 3C905TX 10/100 PCI NIC.
- MS Windows 95 on CD

<Please Call for Monitor>

Pentium II 333MMX $1350
Pentium II 300MMX.....$1215
Pentium II 266MMX.....$1125
Pentium II 233MMX.....$1030

ENGINEERING STATION

- **Intel** Pentium Pro 440FX System
- Intel Pentium Pro CPU with Fna
- L2 Cache Built-in 256/512K
- Built-in EIDE & 16550 IO Ports
- Built-in EPP & Floppy I/F Ports
- 128MB-ECC/EDO with 3.3V Buffer
- Teac 1.44MB Floppy Drive
- 4.3GB Ultra Wide SCSI HDD
- AHA2940UW Ultra SCSI and Intel 10/100 NIC, 16 Bit sound Integrated
- Matrox Millennium 4MB WRAM PCI
- Toshiba 32X SCSI-II CD-ROM
- Mid-Tower Case w/. UL PS
- MS Mouse & 104 Keyboard
- MS NT for Workstation 4.0 on CD

Pentium Pro Dual 200/512....$4150
Pentium Pro Dual 200/256....$2740
Pentium Pro 200/512K $2950
Pentium Pro 200/256K $2190

CAD POWER STATION

- **ASUS/Intel** Pentium II 440BX System
- Intel Pentium II CPU with Fan
- 512K cache with ECC
- Built-in EIDE & 16550 IO Ports
- Built-in EPP & Floppy I/F Ports
- 128MB 168pin SDRAM 100MHz
- Teac 1.44MB Floppy Drive
- 4.3GB Ultra Wide SCSI Hard Drive
- Toshiba 32X SCSI-II CDROM
- AHA 2940UW Ultra SCSI Adapter
- Matrox Mill. II 4MB WRAM AGP
- 16 Bit Sound Creative Lab.
- ATX Mid-Tower Case w/. UL PS
- Yamaha YST-M7 Speakers
- MS PS/2 Mouse & PS/2 Keyboard
- MS Windows NT for Workstation

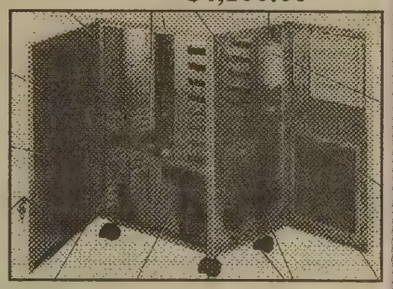
Pentium II 400MMX $2,330
Pentium II 350MMX $2,120

DUAL PENTIUM-II 333MHz SUPER-SERVER

$4,100.00

Includ:

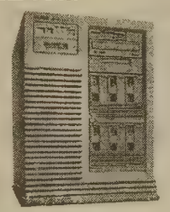
- **Intel R440LX Dual Pentium II M/B**
- **Intel EtherXprss 10/100 and PCI-ISA**
- **Dual-Channel SCSI Controllers**
- **Seagate 9.1GB Ultra-Wide SCSI HD**
- **128MB ECC 168pin SDRAM-10ns**
- **Teac 1.44MB Floppy Disk Drive**
- **Toshiba 32X SCSI-II CD-ROM**
- **Diamond AGP 4MB Video Card**
- **MS PS/2 Mouse and 104 Keyboard**
- **2X 300W Hot-Swap Power Supply**
- **Tower Case w/. 12 Bays & 4 Fans**
- **OS, Hot-Swap HDD and Raid is Customer Option and upgradable**



HP LH II PRO PENTIUM II 300/333Hz

Dual Pentium II 300/333MHz-512k
EDO Dimms 64MB
AIC7870 PCI SCSI Dual
CD-ROM & VGA
Keyboard & Mouse
HP 3 year On-Site

Starts: $4,950.00



** Call for LH Pro, LX Pro, LXe Pro... **

IBM PC Server

IBM E325 Starts Pentium Pro 200MHz 256K, 2nd. CPU Option CD-ROM, 1.44MB FDD K/B and Mouse

Call for Details and Options

5 Year Labor & 1 Year Parts Warranty for Fine Tec Systems

SCSI Hard Disk Drive

Seagate(UN/W/UW/WD/WC)

ST32550N/W	2.1GB	7200RPM	9ms	$420/555
ST32272N/W	2.1GB	7200RPM	8ms	$340/350
ST32272WD/WC	2/1GB	7200RPM	8ms	$420/400
ST34572N/W	4.3GB	7200RPM	8ms	$480/490
ST34572WD/WC	4.3GB	7200RPM	8ms	$590/550
ST34501N/W	4.5GB	10000RPM	8ms	$590/610
ST34501WD/WC	4.5GB	10000RPM	8ms	$670/620
ST39173N/W	9.1GB	7200RPM	8ms	$820/830
ST19171WD/WC	9.1GB	7200RPM	8ms	$950/870
ST19101N/W	9.1GB	10000RPM	8ms	$920/940
ST19101WD/WC	9.1GB	10000RPM	8ms	$1090/1050

<<< Please Call for Seagate NEW LVD Drives>>>

Fujitsu(UN/UW)

M2954 NS/WS	4.4GB	7200RPM	8ms	$490/520
M2949 NS/WS	9.1GB	7200RPM	8ms	$750/770

IBM(UN/UW)

DORS32160W	2.1GB	5400RPM	9ms	$195
DCAS34330N/W	4.3GB	5400RPM	9ms	$275/285
DCHS34300N/W	4.3GB	7200RPM	8ms	$490
DCHS39100W	9.1GB	7200RPM	9ms	$720

WD(UN/UW)

WDE2170S/W	2.1GB	7200RPM	8ms	$340
WDE4360S/W	4.3GB	7200RPM	8ms	$480/490
WD9100S/W	4.3GB	7200RPM	8ms	$730

Quantum (UN/W/UW)

XP31070W	1.0GB 7200RPM	9ms	$225
ST2.1S	2.1GB 5400RPM	9ms	$220
ST3.2S	3.2GB 5400RPM	9ms	$255
ST4.3S	4.3GB 5400RPM	9ms	$290
ST6.4S	6.4GB 5400RPM	9ms	$390
VK2275N/W	2.2GB 7200RPM	8ms	$220/225
VK34550N/W	4.5GB 7200RPM	8ms	$370/375
32275SN/W	2.1GB 7200RPM	8ms	$185/190
34550S/SW	4.5GB 7200RPM	8ms	$470/490
39100S/SW	9.1GB 7200RPM	9ms	$750/760

External Option

Single Bay w./ SCSI Centronic 50 Pins	$90
Single Bay w./ SCSI-II Narrow 50 Pins	$120
Single Bay w./ SCSI-III Wide 68 Pins	$130
2-Bay, 4-Bay and 9-Bay....	Call
SCSI External Cables and Termiantors	Call

SCSI Special !!!

IOmeg 1GB Jaz Drive Int./Ext.	$250/290
IOmeg 100MB Int./Ext. Zip Drive	$105/145
12/20 Plextor Int. SCSI-II CD-ROM	$210
14/32 Plextor Int. SCSI-II CD-ROM	$225
32X Toshiba Int. SCSI -2 CD-ROM	$115
Richo MP6201 CD Rewrite Int. w./SW	$395
Taec 55S, 4X12, CD Recorder SCSI	$420
Yamaha CDRW4260T SCSICD Re-Write	$470
Adaptec AHA2940UW w./Software	$195
Adaptec AHA2944UDW w./Software	$390
Adaptec AHA3940UW w./Software	$420
Buslogic KT-958UW w./software	$250
Kingston 9-Bay Data Silo Rack Mount	$1030
Kingston Data Express Hot Swap Drawer	$225
Mylex/DPT Raid Controller	**Call**

SCSI Tape Backup

HP 4mm Data Series

HP1534(2GB)/1536(4GB) 4mm Data	$520/550
C1599A Dat. Internal 4-8 GB 3.5" x HH	$760
Surestore 1200E Auto-Load Ext. 48GB DDS-2	$2750
C1559A Dat. Ext. 24x6E 144GB DDS-3	$3590

ExaByte and Sony 8mm

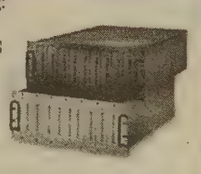
Exabyte 820SE Eliant External 7-14GB Kit	$1820
Exabyte 8700LT External 5-10GB Kit	$690
Sony SDXS300C/BM, AIT 50GB Ext.	$3290

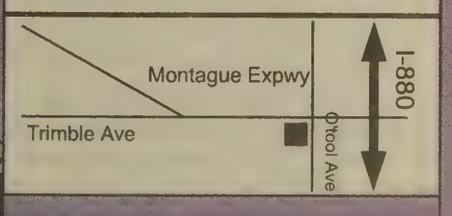
Raid Sub-System

Raid Sub-System including:
* 9 Bays Data Silo (R.M)
* Dual Hot Swap 300W PS

$1,030.00

Hot Swap Module:
* 2.1GB....$550
* 4.3GB....$770
* 9.1GB....$1090





Gov't. School, Corporation and Firm's PO. Welcome

- Not Responsible For Typographical Errors
- Price Subject to Change without Notice
- Order for items not listed also Available

Fine Tec

CENTRAL
COMPUTER SYSTEMS, INC.

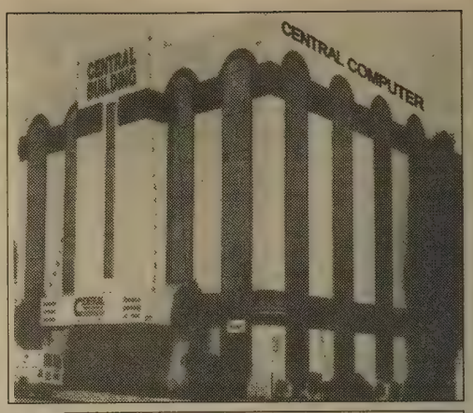
WIDE SELECTION AT LOW PRICES

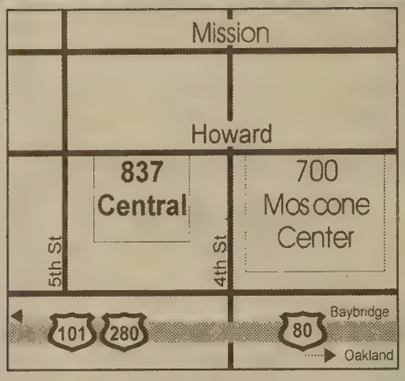
Since 1986

OPEN 7 DAYS!

Mon-Fri: 9:00am-7:30pm, Sat-Sun: 10:30am-6:00pm

Web Page: http://www.centralcomputer.com

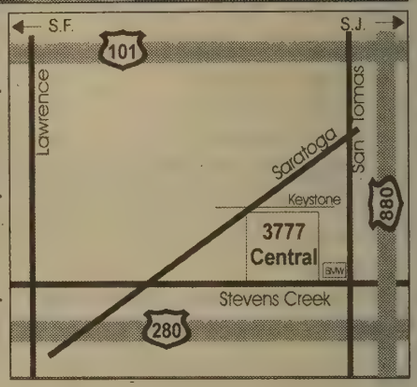




Nearest Bart Station -	Powell
Nearest Muni Lines -	9X, 12, 27, 30, 42 & 76
From CalTrain/Amtrak -	5 Blocks North
From Transbay Terminal -	3 Blocks West
From Freeway 101 -	4th Street Exit

From 101 -	San Tomas Exit (4miles)
From 280 -	Saratoga-Santa Clara Exit (1mile)
From 880 -	Stevens Creek Exit (2miles)

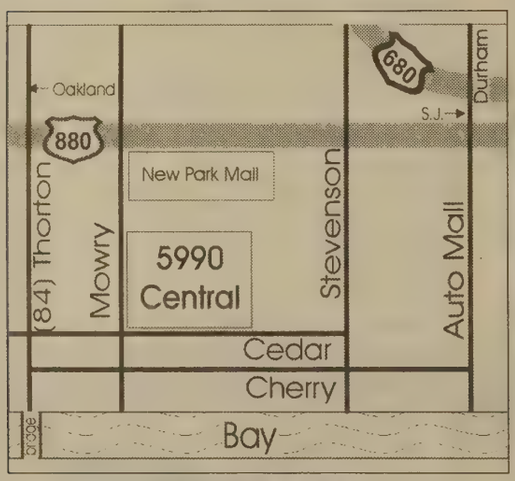
Parking & Entrance at Rear



SAN FRANCISCO
837 Howard Street, San Francisco, CA 94103
TEL: (415) 495-5888 • FAX: (415) 896-5888
Email: ccsf@centralcomputer.com

SANTA CLARA
3777 Stevens Creek Blvd., Santa Clara, CA 95051
TEL: (408) 248-5888 • FAX: (408) 241-0390
Email: central@centralcomputer.com

Visit Our 3rd New Location in Fremont-Newark



NEWARK
5990 Mowry Ave. Newark, CA 94560
TEL: (510) 793-5555
FAX: (510) 795-7888
Email: fremont@centralcomputer.com

From 880 - Mowry Exit
From 680 - Auto Mall Pkwy Exit
From 84 - Cedar Blvd. Exit

MONTHLY SPECIALS

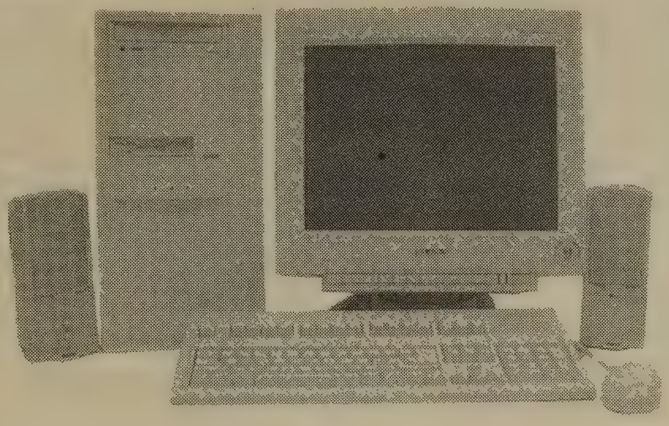
3COM (USR) Courier V.Everything 56k Modem Int / Ext	$205/245		
ASCEND P50-1UBRI ISDN Pipeline 50	$515		
DANPEX 2900PT TP PC	$15	EPSON Stylus 800 Color	$299
HP Laser Jet 4000T	$1195	3COM 3C575-TX PC Card	$145

DISCOVER VISA MasterCard AMERICAN EXPRESS P.O.

- No surcharge for VISA, MC, DISCOVER & AMEX - Reseller and quantity pricing available
- Government, Educational Institution & Corporate Purchase Orders WELCOME
- Prices subject to change w/o notice and to stock on hand. Not responsible for typographical errors

Central Ultra Series

- Intel Pentium® II Processor
- 64MB RAM
- Intel SE440BX Motherboard (with 100MHz & AGP)
- Maxtor 8.4GB UltraDMA HDD
- 32X max IDE CD-ROM & Teac 1.44MB FDD
- Iomega IDE Zip Drive Internal
- ATI Xpert@Work 8MB AGP
- 56K Internal Fax Modem
- Yamaha OPL-3 Sound (on-board)
- Yamaha M7 Multimedia Speakers
- Keytronic PS/2 Keyboard
- Microsoft PS/2 Mouse w/ Pad
- ATX Mid-Tower Case w/ 235W Power Supply
- Microsoft Windows® 95 CD OSR v2.5
- Monitor not included
- 2 Months of Free Internet with Sirius



400MHz Pentium® II w/MMX Technology.....$2199

MMX intel inside pentium PROCESSOR

Microsoft Windows 95

iiyama SPECIALS

MF-8515G 15" 1280x1024 .28 NI	$249
MF-8617E 17" 1600x1200 .26 NI, 69Hz	$479
MF-9017E 17" 1600x1200 .25 NI, 72Hz	$559
S901GT 19" 1600x1200 .26mm NI	$765
S102GT 21" 1800x1440 .27 NI, 74Hz	$1115
A102GT 21" 1800x1440 .28 NI, 74Hz	$1125
LCD Flat Panel:TXA3601GT 14.1" TFT, 1024x768, 72Hz.	$995

Central Thunder Series

- Intel Pentium® II Processor w/ MMX" Technology
- 64MB SDRAM 10ns
- 512K L2 Cache
- Intel Atlanta AL440LX Motherboard
- Quantum 6.4GB UltraDMA HDD
- 32X max CD-ROM Drive & Teac 1.44MB FDD
- ATI Xpert@Work 4MB AGP
- Yamaha OPL-3 3D Sound Card (on-board)
- Microsoft Windows® 95 CD OSR v2.5
- Altec Lansing ACS45 Speakers w/ SubWoofer
- Keytronic PS/2 Keyboard
- Microsoft PS/2 Mouse w/ Pad
- ATX Mid-Tower Case w/ 235W Power Supply
- 56K Internal Fax Modem (K56Flex)
- Iomega Zip Drive Internal w/ One Cartridge
- Monitor not included
- 2 Months of Free Internet Access with Sirius

333MHz Pentium® II.....$1679

266MHz Pentium® II.....$1419

Microsoft Windows 95

MMX intel inside pentium II

Central Gaming Series

- Intel Pentium® II Processor w/ MMX" Technology
- 64MB SDRAM 10ns
- 512K L2 Cache
- J-Bond PCI600E 440LX AGP Motherboard
- Quantum 6.4GB UltraDMA HDD
- 32X IDE CD-ROM Drive & Teac 1.44MB FDD
- Diamond Viper V330 4MB AGP
- Diamond Monster II 8MB PCI
- Sound Blaster AWE64 Value
- Microsoft Side Winder 3D Pro
- Microsoft Windows® 95 CD OSR v2.5
- Altec Lansing ACS45 Speakers w/ SubWoofer
- 56K Internal Fax Modem
- Keytronic PS/2 Keyboard
- Microsoft PS/2 Mouse
- ATX Mid-Tower Case w/ 235W Power Supply
- 2 Months of Free Internet Access with Sirius

266MHz Pentium® II.....$1639

BUNDLES

•Microsoft Bundle #1 (Home) . . . . . add $39
(Encarta '97/ Works 4.0/ Money)

•Microsoft Bundle #2 (Sport) . . . . . add $24
(Flight Simulator 5.1/ Complete Baseball/ Golf 3.0)

•Microsoft Bundle #3 (Kids) . . . . . add $34
(Creative Writer/Explorapedia/Magic School Bus)

Microsoft Office 97 Small Business Edition
w/complete CD and Manuals
+ Microsoft Works/Money. . . . . **add $249**

Academic Office Suite (Student ID required)
- Microsoft Office 97 Standard. **$145**
- Microsoft Office 97 Professional **$189**

Note: add $20 for preload/installation

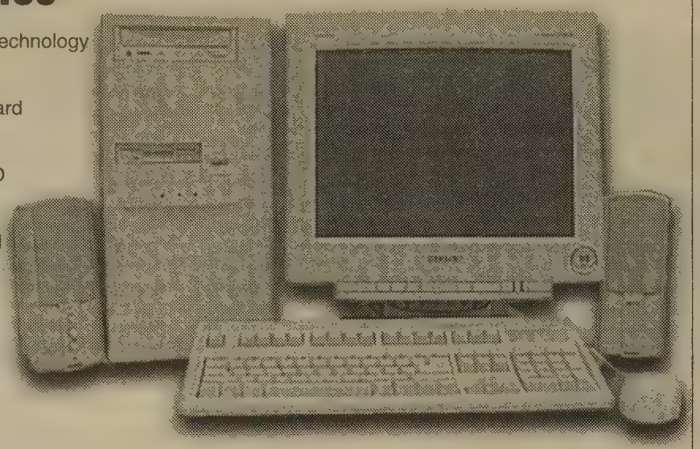
90 Days Same as Cash

-No Interest for 90 Days
-Low Monthly Payments
-On Approved Credits

**(sale price) . . . . . SPECIALS, limited to stock on hand*
Prices subject to change without notice.

http://www.centralcomputer.com for current prices & catalog

Central Home Series



- Intel Pentium® Processor w/ MMX™ Technology
- 32MB SDRAM, 512k Pipeline Cache
- J-Bond PCI500C-K, 430TX Motherboard
- Western Digital 3.2 Ultra DMA HDD
- 24X max CD-ROM, Teac 1.44MB FDD
- Diamond Stealth 2000 Pro 2MB PCI
- ESS 16 IDE w/ Yamaha OPL-3 Sound
- SD693 Multimedia Speakers
- Mitsumi ZW Keyboard
- Microsoft Serial Mouse
- Mid-Tower Case (#3-IWG500)
- Microsoft Windows® 95 CD OSR V2.5
- 33.6 Internal Fax/Modem
- Monitor not included
- 2 Months of Free Internet with Sirius

233MHz Pentium® MMX $845

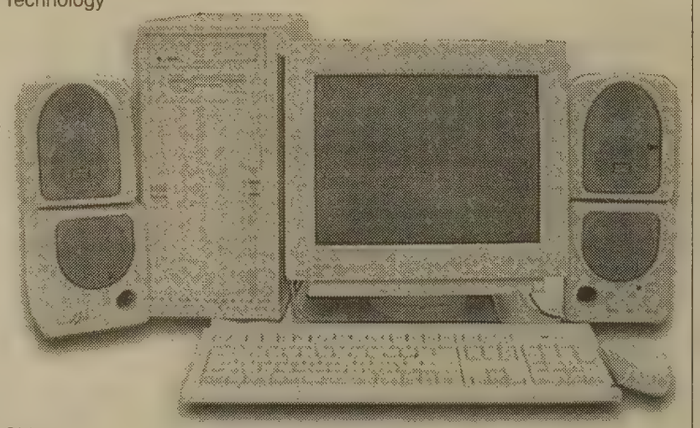
TOSHIBA EQUIUM 7000S

- Intel Pentium® Processor w/ MMX
- 32MB EDO DRAM, 256k Cache
- 4GB HDD, 1.44MB FDD
- 24X IDE CD Rom
- ATI 3D Rage Pro 2MB SGRAM
- Sound Blaster Pro compatible
- Intel EtherExpress 10/100 Lan Adapter
- PS/2 Keyboard & Mouse
- Microsoft Windows 95 OSR2
- Desktop Case
- 3 Year Manufacturer Warranty
- Monitor not included

Options:
- *32MB upgrd $130*
- *15" Toshiba Monitor $375*
- *17" Toshiba Monitor $655*
- *USR 56k Modem Int $165*

266MHz Pentium® MMX . $1589

Central SOHO Series III



- Intel Pentium® II Processor w/ MMX™ Technology
- 32MB SDRAM • 512k L2 Cache
- J-Bond PCI600E 440LX AGP Motherboard
- ATI Xpert@Work 4MB AGP
- Western Digital 3.2GB UltraDMA HDD
- 32X max CD-ROM Drive & Teac 1.44MB FDD
- 56k Internal Fax/Modem
- Yamaha OPL-3 Sound
- SD737 Multimedia Speakers
- Keytronic PS/2 Keyboard
- Microsoft PS/2 Mouse
- ATX Mid-Tower Case w/ 235W Power Supply
- Microsoft Windows® 95 CD OSR V2.5
- Monitor not included
- 2 Months of Free Internal Access with Sirius

266MHz Pentium® II $1079
233MHz Pentium® II $1029

HEWLETT PACKARD BRIO D6513A

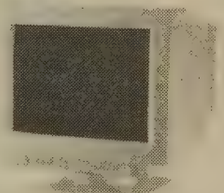
- **Intel Pentium® II Processor w/ MMX**
- 32MB RAM, 256k Cache
- **8GB** HDD, **32X** CD-ROM
- **S3 Trio64-V2 2MB**
- PS/2 Keyboard & Mouse
- **Microsoft Windows 95 OSR2**
- **Microsoft Word**
- Mid Tower Case
- **3 Years Manufacturer Warranty**
- Monitor not included

Options:
- *32MB upgrd $179*
- *15" HP Monitor $325*
- *17" HP Monitor $599*
- *USR 56k Modem Int $165*

300MHz Pentium® II. $1919

MONITOR

CM500U



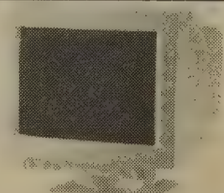
15" (13.7" Viewable Size)
Max Resolution
1280x1024 @ 65Hz
Flat Screen, Non-Interlace, MPRII

$250*

*Advertised price relects special discount given with the purchase of any Central Systems. Previous purchases excluded

HITACHI SUPERSCAN

CM620U

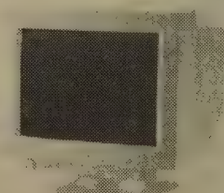


17" (15.9" Viewable Size)
Max Resolution
1280x1024 @ 60Hz
Flat Screen, Non-Interlace, MPRII

$530*

*Advertised price relects special discount given with the purchase of any Central Systems. Previous purchases excluded.

CM751



19" Monitor .26
Max Resolution
1600x1280 @ 75Hz
Flat Screen, Non-Interlace, MPRII

$849*

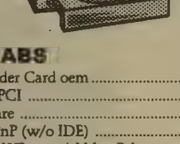
*Advertised price relects special discount given with the purchase of any Central Systems. Previous purchases excluded.

**(sale price) . . . . . SPECIALS, limited to stock on hand*
Prices subject to change without notice.

http://www.centralcomputer.com for current prices & catalog

HARDWARE

1. CD DRIVES & SOUND



CREATIVE LABS
- DVD IDE w. Decoder Card oem ... 269
- Ensoniq 32 Audio PCI ... 45
- Midi Kit + Software ... 65
- Sound Blaster 16 PnP (w/o IDE) ... 39
- Sound Blaster 64 AWE oem / Value Pak ... 69/89
- *Sound Blaster 64 AWE Gold ... *(145)*
- Sound Blaster 64 PCI ... 95

MICROSOLUTION
- Backpack 8X Parallel ... 239

MITSUMI
- FX1402S2 16X IDE Int ... 59
- FX240S 24X IDE Int ... 65
- FX320S 32X IDE Int ... 75

NEC
- CDR-1610 16X SCSI Int oem ... 85
- CDR-1800 24X IDE Int oem ... 75
- CDR-1810 24X SCSI Int oem ... 99

PLEXTOR
- *PX-32X SCSI Int (Caddy) ... *(229)*
- PX-32X SCSI Int (Tray) ... 215

SONY
- CDU-611 24X IDE Int ... 69
- 32X IDE Int ... 79
- PRD-650 Portable 6X w. PCMCIA Kit ... 315

TEAC
- CD524E 24X IDE Int ... 69
- CD516S 16X SCSI Int ... 89
- CD532E 32X IDE Int ... 79

TOSHIBA
- DVD Drive IDE w. Kit oem ... 279
- XM6102B 24X IDE Int ... 69
- XM6201 32X SCSI Int ... 105
- XM6202B 32X IDE Int ... 79

TURTLE BEACH
- Multi-Sound Fiji 20-bit / w. Digital I/O ... 275/329
- Multi-Sound Pinacle 20-bit / w. Digital I/O ... 375/425
- Pinacle Project Studio ... 475
- Tropez Sound 32 Voice ... 145
- Wave Table Sound 32 ... 99

OTHERS
- CD Caddy ... 3.99
- CD Jewel Case for 1 / 3-CD ... 0.45/0.55
- CD Wetsuit for 12 / 24-CD (Kensington) ... 9.95/13.95
- Decoder Card ... 129
- ESS 16 IDE 3D Sound Card ... 25
- Gravis Ultrasound Plug & Play ... 135
- Gravis Ultrasound Pro, PnP ... 175
- J-Bond MF-719 Yamaha 3D 32 w. Midi ... 39
- *Television: Telesound EX16 IDE ... *(68)*

WRITABLE CD DRIVES:
- Adaptec Easy CD Creator Deluxe Software ... 89
- Artmedia 6X/2X/2X IDE Int ... 399
- Elektroson Gear CD Creator Software ... 95
- HP C7200i Rewritable 6X/2X Int ... 415
- HP C7200e Rewritable 6X/2X Ext ... 515
- Phillips Omniwriter Rewritable 6X/2X Int, oem / reg ... 459/499
- Plextor PX-R412 Int / Ext ... 479/559
- Ricoh 6X/2X SCSI Int / Ext ... 469/569
- Sony Spressa 928E/H 8X/2X IDE Int ... 339
- Sony Spressa 960 6X/2X SCSI Recordable ... 385
- Yamaha CRW4001 6X/4X/2X EIDE Int ... 499
- Yamaha CRW4260 TIPC 6X/4X/2X SCSI Int ... 569
- Yamaha CRW4260 TXPM SCSI Ext ... 659

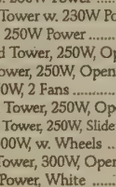
- 3M CDR 74 min. / 10-pk ... 3.95/37
- Artmedia CDR 74. min / 25-pk ... *(1.99)/44
- HP Rewritable CDRW (C4431) ... 19.95
- HP CDR 74 min. (C4432) / 3-pk ... 2.99/8.50
- 10-pk / 25-pk ... 25/59
- Kodak CDR 74min. / 10-pk / 25-pk ... 2.99/25/59
- Ricoh CDR 74 min. / 25-pk ... *(1.99)/44
- Ricoh CDRW 74 min. Re-writable ... 17.95
- Sony CDR 74 min. / 10-pk ... 3.95/37
- TDK CDR 74 min. / 10-pk ... 2.99/25

SPEAKERS:
- Altec ACS45 w. Sub-Woofer ... 79
- Altec ACS51 / ACS52 / ACS53 ... 65/85/125
- Altec ACS150 / ACS500 ... 99/295
- Labtec Stereo LCS-150 / LCS-600 ... 18.95/24.95
- Labtec 1012 / 1022 (10W) ... 35/49
- Labtec 1224 Space Server 3D Stereo (10W) ... 69
- *MLF-CP55 Mini Speakers (4W) ... *(4.99)*
- *Yamaha YST-M7 (5W) ... *(39) 45*
- *Yamaha YST-M45 ... *(59) 69*
- Yamaha Systems (45W) ... 169

SPECIALS
- GLi768: 3D, 380W, 20-20KHz ... 26
- GLi969: 3D, 380W, 20-20KHz ... 27
- *HM2: Headset w. volume control ... *(7.95)*
- *KC3: Headphone + Microphone ... *(6.95)*
- *MC1: Pocket Size Microphone ... *(4.95)*
- *MC2: Central Computer Microphone ... *(2.95)*
- MC2: Nicole Condencer Microphone ... 3.45
- SD202: Full Range Speakers, 180W ... 19.95
- *SD322: Sub-Woofer ... *(29.95)*
- *SD688: Deluxe 3D Surround 360W ... *(45)*
- SD693: Amplified, 80W, 50-15KHz ... 9.95
- SD737: Amplified, 120W, 20-20KHz ... 16.95
- *SD880: Amplified Stereo Speakers 200W ... *(25)*
- SD922S: 3D Systems, 480W, w. Sub-Woofer ... 95
- SD969: Amplified, 380W, 20-20KHz ... 26.50
- *SD980: 3-way Speakers 480W ... *(35)*

Resellers CALL for wholesale prices!

2. CASE



- #1: Baby AT w. 230W Power ... 39
- #2: Baby Tower w. 230W Power ... 29
- #3: IWG500 Mid Tower w. 230W Power ... 59
- #4: Mid Tower w. 250W Power ... 39
- #5: CF-8502A Mid Tower, 250W, Open Side ... 69
- #6: GT212 Mid Tower, 250W, Open Side, 2 Fans .. 105
- #8: Full Tower, 250W, 2 Fans ... 85
- #9: CF-8501S Full Tower, 250W, Open Side ... 89
- #10: KS-A5561 Full Tower, 250W, Slide Open, 2 Fans ... 115
- #11: Full Tower, 300W, w. Wheels ... 149
- #12: GT312 Full Tower, 300W, Open Side, 2 Fans, 8 Bay Slots, PS/2 Power, White ... 149
- #15: Mid Tower w. IDE Mobile Rack ... 65
- #16: 701D Mini Tower w. 230W Power ... 39
- #17: 668A Full Tower w. 250W Power ... 69
- #18: 668B Mid Tower w. 250W Power ... 55
- #19: 668C Mini Tower w. 230W Power ... 39
- #A1: ATX CF-8502A Mid Tower, 235W, Open Side 75
- #A2: ATX Mini-mid Tower, 235W Power ... 79
- #A5: ATX CF-8501S Full Tower, 250W, Open Side . 99
- #A6: ATX GT-232XC Mid Tower, 250W ... 119
- #A7: ATX GT-312 Full Tower, 250W ... 145
- #A8: ATX PC-268A Desktop, 235W ... 75
- #A9: ATX PC-968A Mid Tower, 235W ... 75
- #A10: ATX PC-768A Full Tower, 235W ... 99
- #A12: ATX 668B Mid Tower, 230W ... 79
- #A13: ATX 668A Full Tower, 250W ... 95
- #A14: ATX IWQ500 Full Tower, 235W ... 99
- #A15: ATX Mid Tower, 230W, thumbscrew ... 75

HDD EXTERNAL CASING:
- CF730: 1 half ht IDE Parallel, 50W, 3.5" ... 65
- CF731: 1 half ht SCSI, 50W ... 49
- CF732: 1 half ht SCSI-2, 50W ... 65
- CF733: 1 half ht SCSI-3, 50W ... 69
- CF751: 1 half ht SCSI, 50W ... 51
- CF752: 1 half ht SCSI-2, 5.25" ... 69
- CF753: 1 half ht SCSI-3, 5.25" ... 74
- CF7021: 2 half ht SCSI, 80W ... 75
- CF7022: 2 half ht SCSI-2, 80W ... 99
- CF7023: 2 half ht SCSI-3, 80W ... 105
- CF7041: 4 half ht SCSI, 200W ... 99
- CF7042: 4 half ht SCSI-2, 200W ... 125
- CF7043: 4 half ht SCSI-3, 200W ... 129
- CF7081: 8 half ht SCSI, 250W ... 195
- CF7083: 8 half ht SCSI-3, 250W ... 249
- CFCDO: CD-R IDE Parallel, 50W ... 59
- CFCDR: CD-Rom Box SCSI, 50W, 5.25" ... 69

ANTEC
- IPC2480: 19" Industrial Rackmount Chassis for ATX, 250W ... 329
- IPC2448: 19" Industrial Rackmount Chassis for AT, 300W ... 349
- KS-011+RPP3002: 19 Bay Server (9 front, 10 int. bay) 300W, Hot Swap + Redundant P/S, 2 Fans ... 529
- KS-011+RPT600: 19 Bay File Server (9 front, 10 int. bay) 300W, Redundant Vertical AT P/S, 2 Fans ... 459

SUPERMICRO
- 701: Mid Tower, 230W Power, ATX ... 99
- 750A: Full Tower, 300W Power, ATX ... 189
- 750S: Full Tower w. 300W / 400W ... 185/225

OTHERS
- 6' Rackmount Cabinet, Black ... 1650
- 19" Industrial Rackmount Chassis (support standard AT motherboard), 250W ... 285
- 19" Industrial Rackmount Chassis for ATX, 250W 339

3. CONTROLLERS

Adaptec
- 2940U SCSI PCI w. Kit oem / reg ... 165/229
- 2940UW Ultra-Wide-SCSI PCI Kit oem / reg .. 185/279
- AAA-131 Raid Single Channel / CA ... 435/525
- AAA-133 Raid 3 Channel ... 635
- AHA3940 PCI Multi-Channel SCSI ... 399
- AHA3940UW Ultra-Wide-SCSI w. Kit ... 479
- APA1460A Slim PCMCIA SCSI ... 149
- APA1460B Slim PCMICA SCSI ... 165
- ASW-EZ SCSI 3.1 for Dos & Win ... 59
- ASW-EZ SCSI 4.0 for Win'95 ... 69

ASUS
- AS300UW SCSI PCI & 16-bit audio adapter ... 205
- SC200 SCSI-2 PCI w. NCR chips ... 79

COREL
- Corel SCSI Software v2.5 ... 85

DIAMOND
- *Fire Port 40 Ultra SCSI PCI ... *(119)*

HIGHPOINT
- CDXpress CD-Rom Accelerator CD ... 35
- Ultra DMA-33 PCI ... 65.99
- XStore MMX Accelerator CD ... 9.99

INTIO
- INI-9100 SCSI PCI PnP ... 69
- *INI-9100U SCSI PCI Kit, 20Mb/s ... *(129)*
- *INI-9100UW Ultra-Wide SCSI PCI Kit ... *(169)*
- *INI-9200U Dual SCSI PCI ... *(215)*
- *INI-9200UW Dual Ultra-Wide SCSI PCI ... *(259)*
- *INI-9520U Dual SCSI + Ether Combo ... *(285)*
- *INI-9520UW Dual + Ether Combo ... *(335)*
- *INI-9400U Quad SCSI Ultra ... *(395)*
- *INI-9400UW Quad Ultra-Wide SCSI ... *(459)*

KOUWELL
- KW557A IDE/ 1.44/ 2S (FIFD)/ ECP/ 1G ... 22

LDP (LOMAS DATA)
- *Fast SCSI-2 PCI 10Mb/s ... *(99)*
- *Fast PCI 20, Ultra-Wide-SCSI 40Mb/s ... *(195)*

SIIG (5YR. WARRANTY)
- CN2419 EIDE/ 4HD/ 2FD/ 16-bit ISA ... 49
- CN2420 EIDE/ 4HD/ 16-bit ISA ... 39
- CN2424 EIDE/ 4HD/ 2FD/ 2S 1P 1G/ 16550/ IEEE1284 . 62

OTHERS
- PROMISE EIDE 2300+ IDE/ 4HD/ 2S 1P/ 16550 59

4. CPU

AMD
- AMD-K6-200 w. Fan ... 99
- AMD-K6-233 w. Fan ... 109
- Boxed version w. 3 yr warranty ... 115

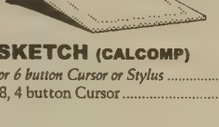
Cyrix (W. FAN)
- 6x86MX-P166 / boxed version ... 95/119
- 6x86MX-P200 / boxed version ... 105/149

intel
- MMX-166Mhz Pentium® / w. 3 yr. warranty ... 99/105
- MMX-200Mhz Pentium® / w. 3 yr. warranty . 115/119
- MMX-233Mhz Pentium® / w. 3 yr. warranty . 149/165
- P54C-133Mhz Pentium® ... 89
- P54C-150Mhz Pentium® ... 99
- P54C-166Mhz Pentium® ... 105
- P54C-200Mhz Pentium® ... 129
- Pentium® Pro 150Mhz w. fan & 256k ... 169
- Pentium® Pro 180Mhz w. fan & 256k ... 169
- Pentium® Pro 200Mhz w. fan & 256k ... 479
- Pentium® II 233Mhz w. fan & 3 yr. warranty ... 235
- Pentium® II 266Mhz w. fan & 3 yr. warranty ... 285
- Pentium® II 300Mhz w. fan & 3 yr warranty ... 419
- Pentium® II 333Mhz w. fan & 3 yr. warranty ... 549
- Pentium® II 350Mhz w. fan & 3 yr. warranty ... 689
- Pentium® II 400Mhz w. fan & 3 yr. warranty ... 899

OverDrive®:
- Pentium® 133Mhz (fr P-60 / 66) ... 199
- Pentium® MMX166Mhz (fr P-100 / 133) ... 215
- Pentium® MMX180Mhz (fr P-90 / 120) ... 235
- Pentium® MMX200Mhz (fr P-100/ 133/ 166) ... 315

OTHERS
- Cooling Fan for 486 CPU ... 4.95
- Cooling Fan for Pentium® processor ... 6.95
- Edimax CPU Switch:
- CAS221 VGA, Keyboard, Mouse for 2PC ... 145
- CAS421 for 4PC (AT & PS/2) ... 215
- CAS601 for 6PC AT only / PS/2 ... 235/236

5. DIGITIZER



SUMMASKETCH (CALCOMP)
- *III 12x12, 4 or 6 button Cursor or Stylus ... *(249)*
- III Pro 12x18, 4 button Cursor ... 465

WACOM
- *Art Pad II 4x5, w. Erasing Ultra Pen, PC ... *(129)*
- Art Pad II 4x5, w. Erasing Ultra Pen, MAC ... 139
- *Art Pad II 4x5, w. Painter, PC ... *(155)*
- *Art Z II 6x8, w. Erasing Ultra Pen, PC ... *(299)*
- *Art Z II 6x8, w. Fractal Expression, PC ... *(359)*
- Art Z II 6x8, w. Painter 5.0, PC ... 375
- Art Z II 6x8, for MAC ... 309
- Art Z II 12x12, w. Erasing Ultra Pen, PC ... 415
- Art Z II 12x12, for MAC ... 429
- Art Z II 12x12, w. Fractal Expression, PC ... 479
- *Art Z II 12x12, w. Painter 5.0, PC ... *(485)*
- Art Z II 12x18, w. Erasing Ultra Pen, PC ... 685
- CT-0405 Pen Partner w. Corel Print & Photohouse .. 95
- UC-520 4-button Pack ... 45
- UD-2 MAC Kit ... 45
- UP-201 Pressure Sensitive Stylus ... 49.95
- UP-701E Erasing Ultra Pen ... 64.95
- UP-801EW Erasing Ultra Pen ... 69.95

6. DRIVES

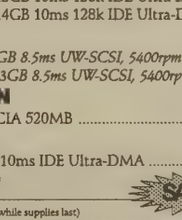
One Year Warranty on All Disk Drives

FLOPPY DRIVE:

MITSUBISHI
- LS-120 120MB w. cartridge, 3.5" ... 115

TEAC
- 1.44MB 3.5" / w. frame ... 25/29

HARD DRIVE:



FUJITSU
- MPB3032AT 3.2GB 10ms 128k IDE Ultra-DMA 155
- MPB3043AT 4.3GB 10ms 128k IDE Ultra-DMA 175
- MPA3052AT 5.2GB 10ms 128k IDE Ultra-DMA ... 199
- MPA3064AT 6.4GB 10ms 128k IDE Ultra-DMA ... 225

IBM
- *DCAS-32160 2GB 8.5ms UW-SCSI, 5400rpm ... *(189)*
- *DCAS-34330 4.3GB 8.5ms UW-SCSI, 5400rpm .... *(285)*

KINGSTON
- DataPak PCMCIA 520MB ... 479

MAXTOR
- 88445D 8.4GB 10ms IDE Ultra-DMA ... 295

Quantum SALE
(limit 1 per customer, while supplies last)
- **ST32100SE-S 2GB 10ms 128k SCSI-2 ... 199**

- ST32100SE-A 2.1GB 9.5ms 128k IDE Ultra-DMA . 139
- ST33200SE-A 3.2GB 9.5ms 128k IDE Ultra-DMA . 165
- ST34300SE-A 4.3GB 9.5ms 128k IDE Ultra-DMA . 189
- ST36400SE-A 6.4GB 9.5ms 128k IDE, 5400rpm 269
- ST33200E 3.2GB 10ms 128k Ultra SCSI ... 255
- ST34300E 4.3GB 10ms 128k Ultra SCSI ... 285
- ST36400SE-S 6.4GB 10ms 128k Ultra SCSI ... 379

SAMSUNG
- WU33205A 3.2GB 10ms 128k IDE Ultra-DMA 149
- WU34323AU 4.3GB 10ms IDE Ultra-DMA 169

Seagate
- ST-32122A 2.1GB IDE DMA ... 129
- ST-33232A 3.2GB IDE DMA ... 155

* 5 year warranty for below drives *
- ST-32272N 2.2GB 9ms Ultra SCSI ... 329
- ST-32272W 2.2GB 9ms Ultra-Wide SCSI ... 349
- ST-34501W 4.5GB UW-SCSI, 10,000rpm ... 629
- ST-34572N 4.5GB 9ms Ultra SCSI ... 529
- ST-34572W 4.5GB 9ms Ultra-Wide SCSI ... 549
- ST-19101N 9GB Ultra SCSI, 10,000rpm ... 945
- ST-19101W 9GB UW-SCSI, 10,000rpm ... 975
- ST-39173N 9GB Ultra SCSI, 7,200rpm ... 809
- ST-39173W 9GB Ultra-Wide SCSI, 7,200rpm ... 819

**(sale price) ... SPECIALS, limited to stock on hand*
Prices subject to change without notice.

http://www.centralcomputer.com for current prices & product catalog

TOSHIBA (FOR NOTEBOOK)
MK3205MAV 3.2GB 13ms 128k IDE 2.5" 249
MK4006MAV 4GB 13ms 379

WESTERN DIGITAL
SALE
(limit 1 per customer, while supplies last)
AC23200 3.2GB 11ms 128k IDE 155
AC12100 2.1GB 12ms 128k IDE DMA 145
AC34300 4.3GB 9.5ms IDE DMA 189
AC35100 5.1GB 9.5ms IDE Ultra-DMA 229
AC36400 6.4GB 9.5ms IDE Ultra-DMA 239

* 5 yr warranty for below drives *
WDE2170 2.17GB 8ms 512k Ultra SCSI 349
WDE2170 2.17GB 8ms 512k Ultra-Wide SCSI 379
*WDE4360 4.3GB 8ms 1MB Ultra SCSI ..... *(485)*
*WDE4360 4.3GB 8ms 1MB Ultra-Wide SCSI ..... *(499)*

REMOVABLE DRIVE:

AVATAR ($50 REBATE)
Shark 250MB Portable Drive Parallel 235
Shark 250MB Cartridge Single 37.95

iomega.
Jaz Disk 1GB - Single / 3-pk / 5-pk 79/235/389
*Jaz Drive 1GB SCSI Int / Ext ..... *(255/269)*
Jaz Traveller 45
Zip Disk 100MB - Single / 3-pk 12.50/36
- 6-pk / 10-pk ..... 70/*(115)
*Zip Drive 100MB Parallel ..... *(129)*
Zip Drive 100MB IDE Int oem 89
Zip Drive 100MB SCSI Int oem 105
*Zip Drive 100MB SCSI Ext ..... *(129)*
*Zip Drive 100 Plus (SCSI & Parallel) ..... *(169)*
Zip Zoom SCSI Accelerator Card for Ext 46

SYQUEST
Sparq 1GB IDE Int 189
Sparq 1GB Parallel 195
SyJet 1.5GB IDE Int 279
SyJet 1.5GB Parallel 289
SyJet 1.5GB SCSI Int / Ext 279/289
1.5GB SyJet Cartridge 65

7. I/O CARD

ADDONICS (QUICKPATH)
Flexport 22EX 2S/ 2P/ 16650 95
Flexport 42 4S/ 2P/ Bi-Dir/ 16550 95

KOUWELL
KW508-E Single Parallel Port 12
KW524-J 2S/ 2P/ 16550 23

SIIG
Cyberpro 2S Highspeed w. 16650 55
Cyberpro 4S Highspeed w. 16650 85
IO1809 2S/ 1P/ 16550 39
IO1829 Cyber Single Serial PCI 55
IO1839 Cyber Parallel PCI 55
IEEE 1284 EPP/ ECP/ Parallel Port 32

SOCKET COMMUNICATION
PCMCIA Serial I/O 16550 149
PCMCIA Dual Serial I/O 215

STB 4-COM
4S/ 16-bit/ 16550/ support Com 1-8, IRQ 99

8. KEYBOARD

FOCUS
FK2001 104 for Win'95 26
FK7200 104 Trackball 27
FK8200 124 Key w. calculator 42
FK9200W 124 Key w. trackball & calculator 45

KEYTRONIC
104 Key - White / Black ..... *(24)/39
104 Key PS/2 26
104 Key PS/2 & AT Combo 28
104 Key Tag Along w. Mouse - White / Black 28/29
LT Touch Pad 85
Wireless IR Classic 104 58
Wireless IR Touchpad / Trackball 75/74

Microsoft
*Natural Keyboard Elite PS/2 oem ..... *(39)*

QTRONIX
Scorpius 104+ for Win'95 - White / Black 23/24
Scorpius 105 / w. Trackball 32/49

SIIG
Minitouch 81 Key, Click 45
W104 for Win'95 29
Wintouch 104 35

OTHERS
ANTEC 104 Key - White / Black 18/39
ANTEC Wrist Support 14.50
BTC 5100 Mini 80 Key 29
EZ 1000 Smart 29
EZ 9720 3D Smart 39
MAXI 101 Key 25
*MITSUMI 104 Model ZW ..... *(14.50)*

9. MEMORY

DRAM
256k x 4 - 70ns 3.50

DIMM
4 x 72 - 60ns, 168-pin (32MB) 89
8 x 72 - 60ns, 168-pin (64MB) 159
16 x 72 - 60ns, 168-pin (128MB) 309
Unbuffer PC100 4 x 64 - 8ns (32MB) 75
Unbuffer PC100 8 x 64 - 8ns (64MB) 159
Unbuffer PC100 16 x 64 - 8ns (128MB) 319
Unbuffer SDRAM 2 x 64 - 10ns (16MB) 29
Unbuffer SDRAM 4 x 64 - 10ns (32MB) 49
Unbuffer SDRAM 8 x 64 - 10ns (64MB) 109
Unbuffer SDRAM 16 x 64 - 10ns (128MB) 199
PC100 w/ECC 8 x 72 - 8ns (64MB) 179
PC100 w/ECC 16 x 72 - 8ns (128MB) 359
SDRAM w/ECC 4 x 72 - 10ns (32MB) 79
SDRAM w/ECC 8 x 72 - 10ns (64MB) 129
SDRAM w/ECC 16 x 72 - 10ns (128MB) 249

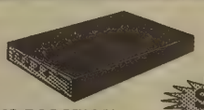
SIMM
4 x 9 - 60ns, 30-pin (4MB) 15
1 x 36 - 60ns, 72-pin (4MB) 19
2 x 36 - 60ns, 72-pin (8MB) 35
4 x 36 - 60ns, 72-pin (16MB) 49
8 x 36 - 60ns, 72-pin (32MB) 99
16 x 36 - 60ns, 72-pin (64MB) 189
EDO 1 x 32 - 60ns (4MB) 9
EDO 2 x 32 - 60ns (8MB) 15
EDO 4 x 32 - 60ns (16MB) 25
EDO 8 x 32 - 60ns (32MB) 49
Non Parity 1 x 32 - 60ns (4MB) 9
Non Parity 2 x 32 - 60ns (8MB) 15
Non Parity 4 x 32 - 60ns (16MB) 25
Non Parity 8 x 32 - 60ns (32MB) 49
Non Parity 16 x 32 - 60ns (64MB) 159

NOTEBOOK MEMORY (3RD PARTY)
for Compaq Armada 4120/ 4130
- 8MB / 16MB / 32MB 55/79/139
for Compaq Contura 410C/ 420C/ 430C
- 4MB / 8MB / 16MB 45/55/85
for DEC HiNote VP535/ 545/ 567
- 8MB / 16MB / 32MB / 64MB 55/79/139/295
for HP Omnibook 5000C/ CT/ CTS/ 5500/ 5700
- 8MB / 16MB / 32MB / 64MB 59/85/139/299
for IBM Thinkpad 365X/ 560/ 760EX/ ED/ EL
- 8MB / 16MB / 32MB 65/135/185
for NEC Versa 6030X/ H
- 8MB / 16MB / 32MB 65/99/165
for Panasonic CF62EX/ 25EX
- 8MB / 16MB / 32MB 95/145/325
for TI TravelMate 6020/ 6030
- 8MB / 16MB 79/149
for Toshiba Libretto 50CT
- 8MB / 16MB 65/179
for Toshiba T1900/ T4500/ T200CS
- 4MB / 8MB / 16MB 89/109/165
for Toshiba T2100 series
- 4MB / 8MB / 16MB / 24MB 45/59/85/145
for Toshiba Portege 300CDT
- 16MB / 32MB 145/169
for Toshiba Portege 610CT
- 8MB / 16MB / 32MB 79/99/169
for Toshiba Portege 650/ 660CDT
- 8MB / 16MB / 32MB / 64MB 75/99/169/299
for Toshiba Satellite Pro 400
- 8MB / 16MB / 32MB 75/99/169
for Toshiba Tecra 500CDT
- 16MB / 32MB / 48MB 89/159/225
*for Toshiba Tecra 700 - 32MB ..... *(235)*
for Toshiba Tecra 710/ 720/ 730CDT
- 8MB / 16MB / 32MB / 64MB 89/130/249/315

PCMCIA FLASH RAM CARD
4MB / 8MB / 10MB / 16MB / 20MB 125/165/179/225/259

PRINTER MEMORY
for HP Laser II / IID
- 1MB / 2MB / 4MB 69/89/175
for HP Laser III / IIIP / IIID
- 1MB / 2MB / 4MB 65/89/125
for HP Laser 4L - 1MB 49
for HP Laser 4 / 4M / 4Si / 1200C
- 4MB / 8MB 35/59
for HP Laser 4+ / 4V / 5 / 5N / 5P / 5Si / 6P / Color Laser 5 / Color Laser 5M / 1600C
- 4MB / 8MB / 16MB / 32MB 29/45/79/165
for HP Laser 5L / 6LXi
- 4MB / 8MB 65/89
for HP Laser 4000
- 8MB / 16MB / 32MB 49/79/199

10. MODEMS & FAX



SALE

3COM (US ROBOTICS)
Courier I-Modem #U w. Analog Int / Ext 239/285
Courier v.90 56k Int / Ext 235/269
*Courier V. Everything 56k Int / Ext ..... *(215/245)*
*#839 Sportster v.34 33.6 Fax Ext ..... *(115)*
*#840 Sportster v.34 33.6 Fax Int oem / reg ..... *(85/89)*
#1171 Sportster v.34 33.6 Fax/ Voice/ Mail/ Speaker Phone Int oem / reg 95/105
#1172 Sportster v.34 33.6 Fax/ Voice/ Mail/ Speaker Phone Ext 125
#1784 Sportster 56k w. Voice Ext 185
#1785 Sportster 56k w. Voice Int oem / reg *(125)/159
*#1786 Sportster 56k Ext ..... *(155) 165*
#1787 Sportster 56k Int oem / reg 119/145
#5606 Sportster 56k v.90 w. Voice Ext 185
#5685 Sportster 56k v.90 w. Voice Int 169
#5686 Sportster 56k v.90 Ext 175
#5687 Sportster 56k v.90 Int 159
#9040 Sportster ISDN 128k Int 185

APOLLO
PCMCIA 56k w. AT&T chips 99

BOCA
SALE
(5-in-1 multimedia)
SE14SRS 14.4 Sound Expression Int ..... *(29)
SE34SRS 28.8 Sound Expression Int ..... *(49)

CREATIVE LABS
Modem Blaster Flash 56k Voice, Speaker Phone Int 125

DIAMOND
Supra Express 33.6 Fax PnP Int oem / reg 65/75
Supra Express 56k Fax PnP Int oem / reg 85/115
Supra Express 56k Fax PnP Ext 135

Hayes
*Accura 33.6 Fax Int / Ext ..... *(125/149)*
Accura 56k Int / Ext 159/179
Optima 33.6 v.34 Fax Int / Ext 189/199
*Optima 288 v.34 PCMCIA w. EZ jack ..... *(99)*
*PC288MT 28.8 v.34 Fax Ext ..... *(99)*
*PM288HC 28.8 v.34 Int ..... *(69)*
PM336HC Int / PM336MT Ext 95/115
PM56HC Int / PM56MT Ext 145/165

JATON
Explorer 56k X2 Fax/ Voice/ Speaker Phone Int 79

MEGAHERTZ
*XJ1336 PCMCIA 33.6 Flash upgradable ..... *(175)*
*XJ1560 PCMCIA 56k ..... *(209) 215*
XJ2560 PCMCIA 56k 179
XJ4336M PCMCIA 33.6 cellular w. Motorola cable 249
XJ4336 Cellular Capable 33.6 215
*XJ5560 Cellular Capable 56k ..... *(219) 235*

MICROCOM
*Deskporte 28.8P v.34 Fax Ext Parallel ..... *(99)*
*Deskporte 28.8S v.34 Fax Ext ..... *(95)*
Officeporte 33.6 Voice ASVD Ext 155

MOTOROLA
SALE
BitSerfer #1749 Pro ISDN Multilink PPP Ext ... *(299)
BitSerfer #1750 ISA ISDN ..... *(199)
BitSerfer #1994 Pro ISA for ISDN ..... *(298)
BitSerfer Pro ISDN Easy Ext ..... *(275)
Modem Serfer 33.6 Int / Ext ..... *(75/95)
Modem Serfer 56k Int / Ext ..... *(94/109)
NT1D Network Terminator 165
Online Serfer 28.8 Fax Int / Ext ..... *(65/69)
Premier 33.6 Int / Ext ..... *(149/169)
Voice Serfer 33.6 Int / Ext ..... *(99/115)

SIMPLE TECHNOLOGY
Communicator 56k PCMCIA Voice & Cellular 199

WISECOM
SALE
(5 year warranty)
3314-JS3 33.6 Data Fax/ Voice Int (Rockwell) . 49
3314-JS7 33.6 Data Fax/ Voice Int (Davidcom) 39
5614-JS3 56k Data Fax/ Voice Int (Rockwell) .. 69

XIRCOM
*CM-33 33.6 Fax PCMCIA ..... *(159)*
*CM-56G 56k PCMCIA Global Access ..... *(189)*

ZOOM (7 YR WARRANTY)
*#2805 33.6 Fax Int ..... *(95)*
#2818 56k Flex Comstar Int 135
#2819 56k Fax Int 115
*#2836 33.6 Fax Ext ..... *(105)*
#2849 56k Fax Ext 136

11. MONITORS

Monitors on Display at our stores for your comparison

Acer
*78iE 17" 1600 x 1200 .26 NI ..... *(419)*

ARTMEDIA (SONY OEM)
*TX1664 15" 1280 x 1024 .25 NI ..... *(289)*
TN1885 17" 1600 x 1280 .25 NI 609
TX1864 17" 1280 x 1024 .25 NI 509
TN2185T 20" 1600 x 1200 .30 NI 1055
GT-960T 20" 1600 x 1200 .25 NI 1159

CTX
*17XA 17" 1600 x 1280 .25 NI ..... *(379)*
PR700 17" 1280 x 1024 .25 AG 30-70khz 495
*PR710 17" 1600 x 1200 .25 AG 30-92khz ..... *(535)*
VL710 17" 1600 x 1280 .26 30-92khz 375
EX800 20" 1600 x 1280 .28 30-85khz 879
*EX900 21" 1600 x 1280 .28 NI ..... *(899)*

DIGIVIEW
MVD1435 14" 1024 x 768 .28 NI 139
MVD1510 15" 1280 x 1024 .28 NI 179
MVD1707 17" 1280 x 1024 .28 NI 299
MVD1709D 17" 1600 x 1200 .25 NI 449
MVD1901 19" 1600 x 1200 .26 NI 639

EIZO (NANAO)
*FX-C5 17" 1280 x 1024 .26 NI ..... *(635)*
TX-C7S 17" 1600 x 1200 .25, Trinitron 789
TX-D7S 20" 1600 x 1280 .30 NI 1545
FX-E8 21" 1600 x 1280 .26 NI 2045

HITACHI SuperScan®
*CM500U 15" Flat 1280 x 1024 .28 NI, 65hz ..... *(259)*
CM620U 17" Flat 1280 x 1024 .28 NI 545
*CM630U 17" Flat 1600 x 1200 .26 NI ..... *(585)*
*CM751 19" 1600 x 1200 .26 NI, 75hz ..... *(855)*
*CM800U 21" 1600 x 1200 .22 NI ..... *(1229)*
*CM802U 21" 1600 x 1200 .22 NI ..... *(1299)*
*CM803U 21" 1800 x 1440 .22 NI, 77hz ..... *(1545)*

IBM
G41T 14" Touch Screen Monitor .28 895
G50T 15" Touch Screen Monitor .28 985
G70 17" 1280 x 1024 .28, 60hz, FST 785
G70T 17" Touch Screen Monitor .28 1465
P70 17" 1600 x 1200 .26, 60hz 995
G200 20" 1600 x 1200 .28, 60hz 1385
P200 20" 1600 x 1280 .31, 60hz 1785
P201 20" 1600 x 1200 .26mm, 85hz 2445

Nyna
SALE
(3 Year warranty)
MF-8515G 15" 1280 x 1024 .28 NI 249
MF-8617E 17" 1600 x 1200 .26 NI, 69hz ... *(479)
MT-9017E 17" 1600 x 1200 .25 NI, 72hz .. *(559)
S-901GT 19" 1600 x 1200 .26mm NI ..... *(765)
S-102GT 21" 1800 x 1440 .27 NI, 74hz ... *(1115)
A-102GT 21" 1800 x 1440 .28 NI, 74hz .. *(1125)

LCD FLAT PANEL:
TXA3601GT 14.1" TFT, 1024 x 768, 72hz 995

IMPRESSION
3 Plus 14" 1024 x 768 .28 NI 145
5 Plus 15" 1280 x 1024 .28 NI 179
7 Plus 17" 1280 x 1024 .28 NI 315
Vienna Pro 17" 1600 x 1280 .25 NI 469

MAG
*DJ702 17" 1280 x 1024 .26 NI, 65hz ..... *(459)*

NEC
*A500 15" 1280 x 1024 .28 NI ..... *(265)*
*E500 15" 1280 x 1024 .25 NI ..... *(299)*
*M500 15" 1280 x 1024 .25 NI ..... *(349)*
*A700 17" 1280 x 1024 .28 NI ..... *(459)*
*E700 17" 1600 x 1280 .25 NI ..... *(585)*
*M700 17" 1280 x 1024 .25 NI ..... *(589)*
*P750 17" 1600 x 1200 .25 NI ..... *(765)*
*E1100 21" 1600 x 1200 .28 NI ..... *(1069)*
*P1150 21" 1600 x 1200 .25 NI, 75hz ..... *(1225)*

*(sale price) ..... SPECIALS, limited to stock on hand
Prices subject to change without notice.

http://www.centralcomputer.com for current prices & product catalog

NOKIA
*447L 17" 1024 x 768 .28 NI ..... *(549)*
447XAV 17" 1600 x 1280 .25 NI 715
*447Xi 17" 1600 x 1280 .25 NI ..... *(689)*
445XAV 21" 1600 x 1280 .26 NI 1845
*445Xi 21" 1600 x 1200 .26 NI, TCO95 ..... *(1425)*
445XPro 21" 1800 x 1440 .21 MP 1549

OPTIQUEST.
V655 15" 1280 x 1024 .28 NI, Digital 329
V775 17" 1600 x 1200 .26 NI 625
V95 19" 1600 x 1280 .26 NI 765
2082DC 20" 1600 x 1200 .28 NI 1199

PIXO
15" 1280 x 1024 .28 NI 179
17" 1280 x 1024 .28 NI 299

PRINCETON
*EO70 17" 1280 x 1024 .28 NI ..... *(375)*
*EO75 17" 1600 x 1280 .26 NI ..... *(465)*
*EO90 19" 1600 x 1200 .26 NI ..... *(689)*
*Ultra 17+ 17" 1600 x 1280 .28 NI ..... *(459)*
AR2.7AV 29" 800 x 600, 38Khz max, video in w/ scan converter, speakers 919

RELISYS
RE451 14" 1024 x 768 .28 NI 139

SCEPTRE
(3 Year Warranty)
*P401 14" 1024 x 768 .28 NI, Digital ..... *(139)*
*P511 15" 1280 x 1024 .28 NI, Digital ..... *(179)*
P73 17" 1280 x 1024 .28 NI, Digital 325
*P75A 17" 1600 x 1200 .26 NI, Digital ..... *(389)*

LCD PANEL: (1 yr warranty)
CD-1115 11.3" DSTN, 800 x 600, 64k color 875
CD-1112T 12.1" TFT, 800 x 600, 256k color 1725
FT15 15" TFT, 1024 x 768, color 2499

SHARP (LCD PANEL)
CE-LT14MN 13.8" Active XGA w. Speakers 1325
LL-T150A 15" Active XGA w. Speakers 2099

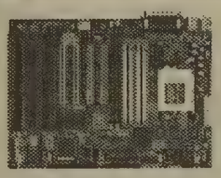
SONY
*CPD-100ES 15" 1280 x 1024 .25 NI ..... *(309)*
*CPD-100GS 15" 1280 x 1024 .25 NI ..... *(349)*
*CPD-200ES 17" 1280 x 1024 .25 NI ..... *(559)*
*CPD-200GS 17" 1280 x 1024 .25 NI ..... *(639)*
*GDM-200PS 17" 1600 x 1280 .25 NI ..... *(779)*
*GDM-400PS 19" 1600 x 1280 .25 NI ..... *(995)*
*20SEII 20" 1600 x 1200 .25 NI ..... *(1159)*
*GDM-500PS 21" 1600 x 1200 .28 NI ..... *(1359)*

TVS
9" 1024 x 768 VGA Mono 115

ViewSonic
E641 14" 1024 x 768 .28 NI 185
E655 15" 1024 x 768 .28 NI 255
*15GA 15" 1280 x 1024 .28 NI, Speaker Phone ..... *(365)*
P665 15" 1280 x 1024 .27 NI 275
EA771 17" 1280 x 1024 .28 NI PnP 489
*G771 17" 1280 x 1024 .27 NI ..... *(435)*
*P775 17" 1600 x 1280 .25 NI ..... *(539)*
PT775 17" 1600 x 1280 .25 NI, Sonictron 689
G790 19" 1600 x 1280 .26 NI 799
*G800 20" 1600 x 1280 .28 NI ..... *(999)*
G810 21" 1600 x 1280 .25 NI 1059
P810 21" 1600 x 1280 .25 NI 1159
P815 21" 1800 x 1440 .25 NI 1265
PT813 21" 1600 x 1280 .28 NI 1285
*29GA 29" 1280 x 1024 .75 stripe pitch ..... *(1999)*

VIEWTRONIC
*DX-1764Q 17" 1280 x 1024 .26 NI ..... *(309)*

12. MOTHERBOARDS



ABIT (W/O CPU)
AX-5 ATX, 512k, 430TX chipset 105
LX-6 P-II, ATX, 440LX chipset 145
*PD5N 512k, SIS chipset ..... *(85)*
*PX-5 512k, 430TX chipset ..... *(85)*
TX-5 512k, 430TX chipset 103

ASUS (W/O CPU)
P2B ATX, 440BX chipset 199
*P2L97 ATX, 440LX chipset ..... *(149)*
*P2L97S ATX, 440LX chipset, SCSI ..... *(235)*
P2L97DS ATX, Dual, 440LX chipset, SCSI 359
TX97L 512k, TX chipset, Dimm 125
TX97LE 512k, TX chipset, 4 Simm/ 2 Dimm 125
TX97X ATX, 512k, TX chipset, Dimm 129
TX97XE ATX, 512k, 4 Simm/ 2 Dimm 129
TX97XE w. Sound 159
TXP4 512k, TX chipset, AT 105

FIC (W/O CPU)
PA-2007 P-200, 1MB, Via, AT, IDE I/O 109
PA-2011 ATX, P-200, 512k, Via 109
PA-2012 ATX, P-233, 1MB, Via 125
VA-502 P-200, 512k, Via, IDE I/O 85
VL-601 ATX, P-II, 440LX 135

GIGABYTE (W/O CPU)
GA586TX2 512k, 430TX, IDE I/O 105
GA586ATX3 ATX, 512k, 430TX, IDE I/O 109
GA686LX ATX, 440LX, IDE I/O 145

intel (W/O CPU)
Atlanta P-II, 512k, 440LX / w. Sound 165/185
Atlanta P-II, 440LX, Sound, AGP 319
DK440LX P-II, Dual, Wide SCSI, Sound, for WS ... 509
R440LX P-II, Dual, Wide SCSI,Lan,VGA, for Server 515
Seattle P-II (350-400Mhz), 440BX chipset,
- w. ISA Sound / PCI Sound 215/229

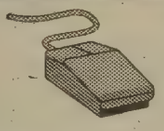
J-BOND (W/O CPU)
PCI500C-J: ATX, P-300, CPU Alarm 105
- w. AHA2940UW SCSI 229
PCI500C-K: P-266, 512k, 430TX, USB 95
- w. AHA-2940U SCSI 175
- w. AHA-2940UW SCSI 225
PCI500C-N: P-266, VP3, AGP, 3 Dimm 99
PCI600E: ATX, P-II, 440LX, 4PCI, 2ISA 129

M-TECH (W/O CPU)
Mustang R534E P-200, 512k, IDE I/O 109
M549 512k, Super TX chipset, 4 Simm/ Dimm 85
R539 512k, TX, 4 Simm/ 2 Dimm, IDE I/O 115
R557 ATX, 512k, TX, 4 Simm/ 2 Dimm 125

SUPERMICRO (W/O CPU)
P5MMA98 ATX, 512k, TX chipset 125
P5MMS98 512k, TX chipset 119
P6DBE P-II, Dual, 440BX chipset 309
P6DBS P-II, Dual, 440BX chipset, SCSI 425
*P6DLS P-II, Dual, 440LX, w. 2940UW SCSI ..... *(329)*
P6SBA 440BX chipset, EIDE I/O 165
P6SBS 440BX chipset, SCSI 289
P6SKEII ATX, P-II, 440FX, EIDE I/O 129
P6SLA P-II, ATX, 440LX, EIDE I/O 159
P6SNS Pro-200, w. 2940UW SCSI 225

TYAN (W/O CPU)
1564D Tomcat IV 512k, Dual, 430HX chipset 175
1564S Tomcat IV 512k, 430HX chipset 139
1571S 512k, 430TX chipset 109
1573S ATX, 512k, 430TX chipset 115
1692DL ATX, Tiger II Dual, 440LX 249
1692S ATX, Tiger II Single 149

13. MOUSE & JOYSTICK



CIRQUE (TOUCH PAD)
Easy Cat PnP 29
Power Cat w. Signature Pen 65
Smart Cat w. Scroll & Zoom 44

IBM
Black Scroll Mouse 68
White Scroll Point Mouse 59

KENSINGTON
Expert Bus 5.0 115
Expert Serial & Trackball 5.0 89
*Mouse in a Box ..... *(26.95)*
*Orbit Trackball ..... *(49)*
*Thinking Mouse Serial & PS/2 ..... *(55)*

LOGITECH
*Coredless Mouseman Pro ..... *(49)*
*First Mouse Plus oem ..... *(24)*
Mouseman Bus 64
Mouseman Combo PC & PS/2 oem / reg 24/39
Mouseman Plus 52
Surfman Cordless Internet Controller 85
Trackman Live Cordless 125
Trackman Marble for Win'95 oem / reg 43/82
Trackman Marble FX 89

Microsoft
Bus 2.0 400dpi w. Bus Card oem / 5-pk 65/325
Combo Mouse (Serial + PS/2) 49.95
Easyball w. Freddi Fish CD 49.95
*Home Mouse Serial ..... *(19.99)*
*IntelliMouse 3.0 for Win'95 ..... *(59.95)*
- oem Serial / oem PS/2 ..... 35/37
IntelliMouse Trackball 69.95
PS/2 2.0 oem 32
Serial 2.0 400dpi oem 27

MOUSE SYSTEMS
Mousel Serial w. pad 19
Omni Mouse 26
*PC Trackball II ..... *(35)*
ProAgio (5-button serial) 39
Serial Bus Card (9IRQS), 5 Com 29
White Mouse (3-button) 29.95

NEC
King Mouse 2-button 13.50
King Mouse PS/2 ..... 13.95

QTRONIX
Libra 90 Pro Trackball 27
Opto-Mechanical Mouse 7.50

JOYSTICK:

C.H. PRODUCTS
Flight Stick Pro 53
Pro Pedals 79.95
Virtual Pilot / Pro (Yoke) 68/75

LOGITECH
Wingman Extrême 29

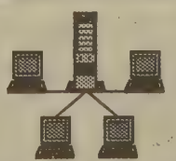
Microsoft
Side Winder 1.0 29
Side Winder 3D Pro 44
Side Winder Force Feedback 145
Side Winder Gamepad 29.95
Side Winder Precision Pro 56

QUICKSHOT
QS123A Warrior 5 12
QS206 Sky Master / w. SU-27 Flanker 25/39
QS216 Strato Warrior 23
QS217 Command Pad 9.95
QS5600V2 Master Pilot '98 + Programmer 69
QS6222 3D Striker + Hexen II 55

THRUSTMASTER
ACM Game Card 29.95
F-16 FLCS / F-16 TQS 125/129
F-22 Pro Flight Control 139
Flight Control System MKII 65
Flight Control System Pro 108
*Formula T2 ..... *(109)*
Grandprix Driving Control 53
Nascar Pro Racing Control 124
*Phazer Pad ..... *(39.95)*
Rudder Control 109
Weapon Control MKII 109
Wizzard (pinball controller + Royal Flush CD) 39
*X-Fighter Flight Control ..... *(45)*
XL Action 28

OTHERS
*Cobra (Mouse Systems) ..... *(9.95)*
Cyclone 3D 38
PC Analog Pro 19.95
PC Gamepad / Pro (10-button) 17/29
3D Virtual Images Mouse Pad ..... 7.99 ea.
Batman Logo Mouse Pad 5.49
Gotham City Mouse Pad 6.99
Looney Tunes Pad w. Screen Saver 9.95
Superman / Logo Mouse Pad 6.99/5.49
Walt Disney Mouse Pad ..... 4.99 ea.
Warner Brothers Mouse Pad ..... 5.99 ea.

14. NETWORK



Government & Education Pricing
Please Call for Details

3Com Networking Partners Partner

*3C250B 100BaseTX Fast 12 Port Hub ..... *(845)*
*3C509B TPO (RJ45 only) oem ..... *(49)*
3C509B-TPC TP+BNC oem / reg ..... *(59)/109
3C509B Combo oem / reg 89/119
3C515-TX Fast 10/100 ISA oem / reg 129/145
*3C562D PC Card Modem 33.6 + Lan TPO ..... *(249)*
*3C562D PC Card Modem 33.6 + Lan Combo ..... *(279)*
3C574-TX 10/100 PCMCIA 149
3C575-TX 10/100 Card Bus PC Card 159
3C589D PCMCIA TP / 5-pk ..... *(139)/629
3C589D PCMCIA Combo / 5-pk ..... *(179)/849
3C597-TX EISA 10/100 TP 239
*3C882 Impact IQ ISDN v.32bis Ext ..... *(215)*
3C892 Office Connect ISDN Net Modem 389
3C900 PCI TPO 105
3C900 PCI Combo oem / reg ..... *(85)/135
*3C905-TX PCI 10/100 TP oem / reg ..... *(75/89)*
3C905B-TX PCI (remote wake-up) oem / reg 74/95
*3C905B-NM PCI 10/100 TP oem ..... *(69)*
*3C16470 Link Builder 12 Port ..... *(299)*
3C16405 Port Switch 40 Hub 12 Port 475
*3C16406 Port Switch 40 Hub 24 Port ..... *(795)*
3C16590 Dual Speed Hub 12 Port 1165
3C16591 Dual Speed Hub 24 Port 1795
*3C16670A Superstack II Hub 12 Port ..... *(469)*
*3C16671A Superstack II Hub 24 Port ..... *(799)*
*3C16700 TPO Office Connect Hub 8 Port ..... *(95)*
*3C16701 TPC Office Connect Hub (8TP+BNC) ... *(129)*
*3C16702 Office Connect Hub (16TP+BNC) ..... *(215)*
*3C16703 Office Connect Hub 4TP Combo ..... *(89)*
*3C16704 Office Connect Hub 4TP ..... *(69)*
*3C16720 Office Connect 100 Hub 8 Port ..... *(445)*
*3C16721 TP1200, 12 Port Fast Hub ..... *(495)*
*3C16722 TP800, 8 Port Fast Hub ..... *(339)*
*3C16723 TP400, 4 Port Fast Hub ..... *(199)*
*3C16731 Office Connect Switch Hub 140M ..... *(665)*
3C16733 4 Port 10/100 Switch 479
*3C16900A Switch 1000 24 Port 1 Fast ..... *(1595)*
*3C16901A Switch 1000 12 Port 1 Fast ..... *(1195)*
*3C16942A Switch 3000TX 10/100 12 Port ..... *(1595)*

NETSERVER:
*Netserver/8 Plus (#1877) ..... *(2795)*
*Netserver/8 I-Modem Plus (#1879) ..... *(3495)*

ALLIED TELESYN
3012TR Workgroup Hub (12TP+AUI+BNC) 165
3016TR Workgroup Hub (16TP+AUI+BNC) 189
3024TR Workgroup Hub (24TP+AUI+BNC) 249
MC12T UTP to BNC Conversion Kit 119
*MR415T Mini Hub 4 Port ..... *(49) 54*
*MR815T Mini Hub 8 Port ..... *(59) 64*
MR820TR Microhub 8 Port (8TP+AUI+BNC) 115
MX26F Fiber Optics Transceiver 145
MX40F Fiber Optics Transceiver 139

APOLLO
PCMCIA LAN Ethernet Adapter Combo 79

ARTISOFT
Extra Mail for Win'95 215
I-Share 2.5, 32 sessions (internet for Lantastic) 179
Lantastic 7.0 Single - CD / FD 85/89
Lantastic 7.0 10-user - CD / FD 355/385
Lantastic 7.0 1-user Add On 129
Lantastic 7.0 Starter Kit 2-user - CD+FD 249
Lantastic 7.0 Unlimited User - CD 725
Lantastic Power Suite:
-1 / 5 / 10 / 25-user 149/599/1075/2295
- conversion for 1 / 5 / 10-user 89/345/595
NR-Pro 2000A Combo / 10-pk 85/755
NR-Pro 2000T TP / 10-pk 79/625

ASANTÉ
*10T Hub 8 Port (8TP+BNC) ..... *(99)*
*10T Hub 12 Port (12TP+1BNC+1AUI) ..... *(149)*
*10T Hub 24 Port ..... *(345)*
*Fast 100BaseTX 12 Port Hub, stackable ..... *(1475)*
*Fast 100BaseTX 12 Port Hub, PnP ..... *(1195)*
*FriendlyNet 5 Port Hub TP ..... *(59)*
FriendlyNet 8 Port Hub TP 65

ASCEND
*P15-1UBRI: ISDN ..... *(249)*
*P25-1U-FX: ISDN Pipeline 25 + 4 Ethernet ..... *(435)*
*P25-1U-PX: ISDN Pipeline 25 + IP Routing ..... *(499)*
*P50-1UBRI: ISDN Pipeline 50 ..... *(535)*
- w. Secure Firewall P50 ..... add 335
*P75-1UBRI: ISDN Pipeline 75 ..... *(625)*
- w. Secure Firewall P75 ..... add 335
*P130-1UBRI-FT1: ISDN ..... *(1199)*
- w. Secure Firewall P130 ..... add 645
Max 200+ (M201 - 4BRIU) 2975

Bay Networks
AT2202001: Bay Stack 100BT 12 Port 1595
CG1001E01: Bay Stack 12 Port 599
CG1001E02: Bay Stack 24 Port 975
*CG1004E08: Bay Stack 4 Port + BNC ..... *(85)*
CG1001E09: Bay Stack 8 Port + BNC + AUI 175
Lattislink 2800A: 16TP + 1AUI 559
Lattihub 2803: 16TP + 1AUI, stackable 599
NetGear FE108: 8 Port 100 Hub, non-stackable 375
NetGear FE508: 8 Port Fast 100 Hub 549
NetGear FE516: 16 Port Fast 100 Hub 685

**(sale price) ..... SPECIALS, limited to stock on hand*
Prices subject to change without notice.

http://www.centralcomputer.com for current prices & product catalog

NOTEBOOKS / PALMTOPS / WORKSTATIONS & SERVERS

Notebooks / Palmtops

3COM (US ROBOTICS)

Palm III (80300U) 375
*Palm Pilot Personal 512k..... *(179)*
*Palm Pilot Professional 1MB..... *(259)*
Accessories:
(10101U) Slim Leather Case 25
(10108U) Pen 3-pk..... 7.99
(10109U) Cradle for Windows 29
(10117U) Belt Crib Case..... 24
(10264U) Deluxe Leather Case 58

ASUS

P6300: P-233MMX, 32MB SDRAM, 3GB, 512k, 20X CD, 13.3" TFT, 2MB XGA 2899

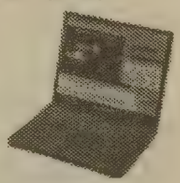
CHEM USA

Chembook 2600: P-200MMX, 32MB, 2.1GB, 14X CD, 12.1" TFT, Win'95, Li-Ion 1749
Chembook 2700: P-233MMX, 32MB, 2.1GB, 20X CD, 14.2" TFT, 4MB Video, Win'95, Li-Ion 2259
Chembook 3300: 32MB, 2.1GB, 20X, 12.1" TFT, Win'95, w. P-166MMX 1495
- w. P-200MMX 1519
- w. P-233MMX 1549
Chembook 6000:
- IMM P-266MMX, 32MB SDRAM, 3GB, 20X CD, 13.3" TFT, XGA, Win'95 2735
- PII-266, 48MB, 3GB, 13.1" TFT, Win'95 3059
Chembook 7000:
P-266, 64MB, 4GB, 15" TFT, Win'95 3269
Chembook 9780:
- P-200, 32MB SDRAM, 2.1GB, 20X CD, 12.1" TFT, SVGA, Win'95, Li-Ion 1770
- P-233MMX, 32MB SDRAM, 3GB, 20X CD, 14.1" TFT, XGA, Win'95, Li-Ion 2369

DFI (1 YR ON-SITE WARRANTY)

6600: P-150, 16MB, 1.4GB, 10X CD, 12.1" DSTN, Win'95, Carrying Bag 1399
6620: P-166MMX, 32MB, 2.1GB, 20X CD, 12.1" TFT, Win'95 1629
6700: P-166MMX, 32MB, 2.1GB, 24X CD, 13.3" TFT, Win'95 2179
6700: P-233MMX, 32MB, 2.1GB, 24X CD, 13.3" TFT, Win'95 2269
*8120: P-200MMX, 32MB, 2.1GB, 20X CD, 33.6 modem, 12.1" TFT, Video Capture, Win'95, Li-Ion, Targus Bag ..... *(1825)*
8241: P-200MMX, 32MB, 2.1GB, 20X, 33.6 modem, 14.2" TFT, Win'95, Li-Ion, Targus Bag 2419

DIGITAL EQUIPMENT (DEC)



HiNote VP735:
P-233MMX, 32MB, 4GB, 20X CD, 13.3" TFT, XGS, Win NT 4.0 3675
HiNote VP745:
P-266MMX, 32MB, 4GB, 20X CD, 13.3" TFT, Win'95 3085

EVEREX

StepNote SE: P-166MMX, 32MB, 2.1GB, 20X CD, 12.1" TFT, Win'95 1945
StepNote SK: P-233MMX, 64MB, 3.2GB, 20X CD, 56k modem, 13.3" TFT, Win'95 2889

FUJITSU

*Lifebook 635TX: Ultra Thin, P-133MMX, 16MB, 2GB, 33.6 modem, 12.1" TFT ..... *(1500)*
*Lifebook 655TX: P-150MMX, 16MB, 1.3GB, 33.6 modem, 12.1" TFT ..... *(1795)*
Lifebook 675TX: P-200MMX, 3.2GB, 32MB, 56k modem, 12.1" TFT, Win'95 3635
Lifebook 985TX: P-233MMX, 32MB, 5GB, 20X CD, 56k modem, 13.3" TFT, DSVD, Win'95 4179

HITACHI

Traveller (#3745): 2.75lbs, P-133MMX, 24MB, 1GB, 8.4" TFT, Win'95, Li-Ion 1729
VisionBook Pro (#7340): P-133MMX, 16MB, 1.4GB, 10X, 56Kx2 modem, 12.1" TFT, 10BT, Win'95, NiMH 1559
VisionBook Pro (#7580):
P-233MMX, 32MB, 3.2GB, 20X CD, 56Kx2 modem, 13.3" TFT, 10BT, Win'95, Li-Ion 3100
VisionBook Pro (#7590):
P-266MMX, 48MB, 4GB, 20X CD, 56Kx2 modem, 13.3" TFT, Win'95 3585
VisionDESK (#1120) - all-in-1 LCD Desktop:
P-233MMX, 32MB, 4.3GB, 20X CD, 56Kx2 modem, 13.3" TFT, 10/100BT, Win'95 2519

HEWLETT PACKARD

Authorized Reseller

NOTEBOOK:
Omnibook 800CT (F1360A):
P-166MMX, 16MB, 2GB, 10.4" TFT 3459
Omnibook 3000CTX (F1392A):
*P-233MMX, 16MB, 4GB, 13.3" TFT, XGA, Win'95, Li-Ion ..... *(2659)*
Omnibook 3000CTX (F1394A):
P-266MMX, 16MB, 4GB, 12.1" TFT, Win'95 2975
Upgrades for 3000CTX:
- 16MB module (F1363A) 79
- 20X CD Rom (F1387A) 249
- Port Replicator (F1381A) 215
- Zip Drive Internal (F1388A) 279
Omnibook 5700CT (F4352A):
*P-150MMX, 16MB, 2GB, 12.1" TFT ..... *(1579)*
Omnibook 5700CT (F4353A):
*P-166MMX, 16MB, 2GB, 12.1" TFT ..... *(1825)*

PALMTOP:
*320LX (F1221A) 640x240, 4MB ..... *(395)*
Accessories:
- (F1218A) AC Adapter 29.99
- (F1223A) Synch Cable 16
- (F1224A) Spare Cable 32
- (F1225A) Stylus 12
- (F1227A) Leather Case 68
- 2MB CF Card / w. Adapter 79/99
- 4MB CF Card / w. Adapter 119/149
*360LX (F1238A) 8MB ..... *(595)*
620LX (F1250A) Color 799
Windows CE Upgrade Kit (F1239A) 125

IBM

TP380D (#2635-3AU):
P-150MMX, 16MB, 2.1GB, 8X, 12.1" TFT, Win'95...2100
TP380E:
P-150MMX, 16MB, 2.1GB, 12.1' FRSTN, Win'95, Ni-MH.....1515
TP380ED (#2635-5AU):
P-166MMX, 16MB, 2.1GB, 8X CD, 12.1" FRSTN, Win'95, Li-Ion 1900
TP380ED (#2635-6AU):
P-166MMX, 16MB, 3GB, 8X, 12.1" TFT, Win'95 . 2415
TP380XD:
P-266MMX, 32MB, 5.1GB, 24X, 12.1" TFT, W'95 2935
TP560:
*P-133, 8MB, 2.1GB, 11.3" DSTN, Win'95, Case *(1499)*
TP560E (#2640-40U):
P-166MMX, 16MB, 2.1GB, 12.1" TFT, Win'95 2975
TP560X (#2640-70U):
P-233MMX, 32MB, 4GB, 12.1" TFT 3599
TP770 (#9548-40U):
P-200MMX, 32MB, 3.2GB, 13.3" TFT, XGA, Win'95 .. 2895
TP770 (#95491AU):
P-233MMX, 32MB, 5.1GB, 14.1" TFT, Win'95 4159

POC

POC-Note 523: P-233MMX, 32MB, 3GB, 13.3" TFT .. 2325

PSION

Palmtop Series 5 4MB 445
Palmtop Series 5 8MB 525

SCEPTRE

S4500: P-166MMX, 16MB, 2GB, 12X CD, 33.6 modem, 12.1" TFT, Li-Ion 1435
S5500: MMO Tillamook P-233MMX, 32MB, 3GB, 20X CD, 13.3" TFT 2559

SHARP

Mobileon HC4500C:
Palmtop, Color, 16MB, 33.6 modem 965
Accessories (for HC4500C):
- Digital Camera 309
- Docking Station 125
PC-M100: P-200MMX, 32MB, 2.1GB, 56k modem, 12.1" TFT, Win'95 2250

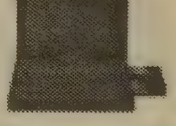
TATUNG

TNB-5600: P-166MMX, 32MB, 1.4GB, 33.6 modem, 12.1" TFT, Win'95, Li-Ion 1729

TOSHIBA

Libretto 70CT:
P-120, 16MB, 1.58GB, 6.1" TFT, Win'95, Li-Ion.....1669
Libretto 100CT:
P-166MMX, 32MB, 2.1GB, 7.1" TFT, Win'95.....2430
Portege 300CT:
P-133MMX, 32MB, 4GB, 10X CD, 33.6 modem, 10.4" TFT, Win'95 1499
- Multimedia Port Replicator (for 300CT) 435
Portege 320CT:
P-266MMX, 32MB, 4GB, K56 modem, 10.4" TFT, Win'95 3289
Satellite Pro 480CDT:
P-233MMX, 32MB, 3.8GB, 10X CD, 33.6 modem, 12.1" TFT, Win'95 3485
Satellite Pro 490CDT:
PII-266, 32MB, 4GB, 20X CD, K56 modem, 12.1" TFT, Win'95 3549
Satellite Pro 490XCDT: PII-266, 32MB, 4GB, 20X CD, K56 modem, 13.3" TFT, Win'95 3985
*Tecra 520CDT: P-166MMX, 32MB, 2GB, 10X CD, modem, 12.1" TFT, Win'95 ..... *(2256)*
Tecra 530CDT: P-166MMX, 32MB, 2GB, 10X CD, modem, 12.1" TFT, XGA, Win'95 2985
Tecra 550CDT: P-266MMX, 32MB, 3.82GB, 20X CD, K56 modem, 12.1" TFT, XGA, Win'95 3925
Tecra 730XCDT: P-150MMX, 16MB, 2GB, 10X CD, 28.8 modem, 12.1" TFT, Win'95 1499
Tecra 740CDT: P-166MMX, 16MB, 3GB, 10X CD, 28.8 modem, 13.3" TFT 2719
Tecra 750CDM: P-233MMX, 32MB, 4.7GB, 20X CD, K56 modem, 13.3" TFT, 4MB SGRAM, Win'95 .. 4889
Tecra 750DVD: P-233MMX, 64MB, 4.7GB, DVD Video, K56 modem, 13.3" TFT, 4MB SGRAM, Win'95 .. 5279
Tecra 780CDM: PII-266, 64MB, 5GB, Camera, 20X CD, K56 modem, 13.3" TFT 5099
Tecra 780DVD: PII-266, 64MB, 5GB, Camera, DVD, K56 modem, 13.3" TFT 5499

TWINHEAD



Slimnote 9166TZ21:
*P-166, 32MB, 2.1GB, 10X, 33.6 modem, 12.1" TFT, Win'95... ..... *(1475)*
Slimnote 9T166CZ:
P-166MMX, 16MB, 2.1GB, 20X CD, 12.1" DSTN, Win'95, Ni-MH 1395
Upgrades:- 16MB RAM 69
Slimnote 9T166TH:
P-166MMX, 32MB, 2.1GB, 20X CD, 12.1" TFT, XGA, Win'95, NiMH 1849
Slimnote 9TE200TZ:
P-200MMX, 32MB, 2.1GB, 12.1" TFT, Win'95, Li-Ion 1649
Slimnote EX200TG:
P-200, 32MB, 3GB, 20X CD, 1024x768, 13.3" TFT, 4MB VGA, Win'95, Li-Ion 2219
Slimnote EX233TG:
P-233, 32MB, 3GB, 20X CD, 1024x768, 13.3" TFT, 4MB VGA, Win'95, Li-Ion 2345
Slimnote EX266TG:
P-266MMX, 32MB, 3GB, 20X CD, 13.3" TFT, Win'95, Li-Ion 2489
Slimnote XL200TK:
P-200, 32MB, 3GB, 20X CD, 14.2" TFT, XGA, Win'95 2385
Slimnote XL233TK:
P-233, 32MB, 3GB, 20X CD, 14.2" TFT, XGA, Win'95 2479
Slimnote XL266TK:
P-266MMX, 32MB, 3GB, 20X CD, 14.2" TFT, Win'95, Li-Ion 2649

OTHERS

Kensington: Deluxe Carrying Case 28.95
Kensington: Wet Suite for Palmtop 11.50
*Kensington Port: MicroSaver ..... *(35.95)*
Pacific Oversea: SB-510 Black Leather Case 13" 39
Pacifict Oversea: SB-3302 Standard Leather Bag 55
*Targus: Notepad Case (CNO-4) ..... *(24.95)*
Targus: Notepad Plus (CNP-1) 45
Targus: Palmtop Case (CH50C) 69

Workstations / Servers

DIGITAL

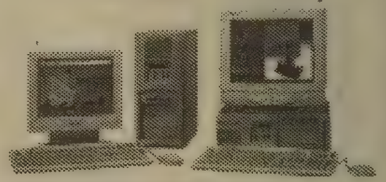
PC-3500:
- PII-266, 32MB, 3.2GB, 32X, Tower, Win NT 1549
- PII-300, 32MB, 4GB, 32X, Tower, Win'95 1739

EVEREX

P-233MMX, 32MB, 3GB, 24X CD, 56k modem, Keyboard, Mouse, Win'95 955

HEWLETT PACKARD

• MT = Tower • DT = Desktop



Brio/MT (D5832A): PII-266, 32MB, 4GB, 24X CD, Win'95 1629
Brio/MT (D5833A): PII-266, 32MB, 8GB, 32X CD, 56k modem, Win'95 1715
Brio/MT (D5834A): PII-333, 64MB, 8GB, 32X CD, 56k modem, Win'95 2115
Brio/MT (D5845A): PII-233, 32MB, 4GB, 24X CD, 56k modem, Win'95 1519
Brio/MT (D6513A): PII-300, 32MB, 8GB, 32X CD, Win'95 1649
Kayak XA/MT (D4806N): PII-233, 32MB, 2.5GB, 24X CD, 10/100BT, Win NT 4.0 1669
Kayak XA/MT (D4808N): PII-266, 32MB, 4.3GB, 24X CD, 10/100BT, Win NT 4.0 1945
Kayak XA/MT (D6494N): PII-333, 64MB, 4.5GB SCSI, 24X CD, 10/100BT, Win NT 4.0 2469
Kayak XU/MT (D4691N): PII-266, 32MB, 2.1GB SCSI, 24X CD, 10/100BT, Win NT 4.0 2619
Kayak XU/MT (D4694N): PII-300 Dual, 64MB, 4.5GB SCSI, 24X CD, 10/100BT, Win NT 4.0 3749
Kayak XW/MT (D5507N): PII-300, 128MB, 24X CD, Dual 4.5GB Fast RAID, 10/100BT, Win NT 4.0 ... 6599

NETSERVERS:
E45/MT (D4974A): PII-233, 32MB, 512k, 4.2GB SCSI, 24X CD, 10/100 NIC 1839
E45/MT (D4976A): PII-266, 32MB, 512k, 4.2GB SCSI, 24X CD, 10/100 NIC 2179
E50/MT (D6033A): PII-300, 64MB, 4.2GB SCSIUW, 24X CD, 10/100 NIC 2199
LD Pro/MT (D4962A): Pro-200, 32MB, 256k, 2.1GB SCSI Hot-Swap, 12X CD, 10/100 NIC 3135
LH-Pro (D5956A): Pro-200, 128MB, 3x 4.2GB 8485
LH-II (D5974A): PII-266, 64MB, 3x 4.2GB 7055

IBM

IntelliStation MPro2D-10U: PII-233, 32MB, 4.2GB, 24X CD, 10/100BT, Win NT 2839
IntelliStation MPro3D-12U: PII-300, 64MB, 6.4GB, 24X CD, 10/100BT, Win NT 3799
PC300GL:
- PII-266, 32MB, 4.2GB, 32X, Desktop, Win'95 1479
- PII-333, 64MB, 4.2GB, 32X, Tower, Win NT 2079
PC300PL-50U: P-233MMX, 32MB, 4.3GB, 24X CD, Win NT 2035
PC300XL-10U: PII-233, 32MB, 2.5GB, 16X CD, 10BT, Win NT 2065
PC300XL-51U: PII-266, 32MB, 4.2GB, 16X CD, 10BT, Win NT 2355
PC300XL-53U: PII-300, 32MB, 4.2GB, 16X CD, Win NT 2675

SERVERS (w/o OS):
325-PTW: PII-233, 32MB, 4.5GB UWSCSI 3285
330-PBO: PII-266, 64MB, 9.1GB UWSCSI 4950

TOSHIBA

• D=Desktop • M=Tower

Equium 5160D: P-166MMX, 32MB, 2GB, 12X CD, Win'95, 10/100 NIC 1275
Equium 5230D: P-233MMX, 32MB, 3GB, 24X CD, Win'95, 10/100 NIC 1545
Equium 6230D: PII-233, 32MB, 3GB, 24X CD, Win NT, 10/100 NIC 1810
Equium 6260M: PII-266, 32MB, 4GB, 16X CD, Win NT, 10/100 NIC 1999
Equium 7000D: PII-300, 32MB, 4GB, 24X, Win NT, NIC 1729

NO Returns. Only Satisfaction Warranty from Manufacturers.

**(sale price) ..... SPECIALS, limited to stock on hand*
Prices subject to change without notice.

http://www.centralcomputer.com for current prices & product catalog

CASTELLE
FaxPress 1500N Ether 1 Line for NW & NT 1995
Office Connect CD Rom Server 569
Office Connect Ether 2P Printer Server ..... *(299)
Office Connect Ether 1 Line Fax Server 1195

CHEYENNE
Arc Serve 6.1 for Win - 5 to 25-user (netware) 435
Arc Serve 6.1 for Netware Enterprise 1095
Arc Serve 6.5 for Win NT 4.0 Single Server 415
Arc Serve 6.5 for Win NT 4.0 Enterprise 739
Arc Serve 6.5 for Win NT Workstation 99
Arc Serve for MAC - 5 / 20-user 159/309
Arc Solo Backup software for Dos / Win 119/118
Fax Server NLM 5.0:
- 5 / 10 / 25-user 355/639/999
Innocular for Netware Server 4.0 Unlimited ..... *(535)
Innocular for Win'95 (Anti-Virus) 45
Innocular for Win NT Server 575
Innocular for Win NT add-on Arc Serve ..... *(279)
Innocular for Win NT Workstation Client 46

CISCO SYSTEMS
1528: Microhub 8 Port 10/100 479
CPA-762 ISDN BRI w. NT1 525
CPA-1604 Bridge w. NT1 1295
CPA-2501 Router 1 Ethernet 2 Serial 1695
Catalyst WS-C1900; 24TP, 2BTX ..... *(1399)

CNET
2000E+ ISA Combo PnP 27
8800TPC Hub (8TP + BNC) ..... *(65)
8816TPC Hub (16TP + BNC) ..... *(125)

DANPEX
2000PNP ISA Combo ..... *(17)
2900PT PCI RJ45 ..... *(45)
2900P2 PCI Combo ..... *(29)
3270 Emulation for PC / PS/2 ..... 175/195
5250 Emulation for PC / PS/2 ..... 199/235
6200P2 PCMCIA (type II), BNC + TP ..... *(59)
9400P3 32-bit Combo PCI (DEC, full duplex) ..... *(45)
EN-500 5 Port Hub TP ..... *(39)
EN-1600 16 Port Hub R.M. ..... *(99)
EN-3200 32 Port Hub R.M. 255
ER-200 2 Port Repeater Coax 175
ER-400 4 Port Repeater Coax 249
ET-109 Converter (10BaseT to BaseFL) 169
ET-509 Translator (UTP to BNC) 109
ET-510 Translator (UTP to AUI) 107
FE-1000TX ISA 10/100BaseTX ..... *(48)
FE-1400TX PCI 10/100BaseTX ..... *(49)
Fast Ethernet Starter Kit (Fast 4 Port Hub + 2 PCI 100TX + 2 Cable cat. 5 TP 15') ..... *(195)

HEWLETT PACKARD
J1120AA Network Node Manager for NT 3345
J2550B Jet Direct TP 279
J2552B Jet Direct Combo 345
J2556B Jet Direct 10/100 Combo ..... *(385)
J2573A 10/100 VG Selectable ISA 169
J2585A 10/100 VG Selectable PCI 135
J2590A Jet DirectEX Plus 3 for 100VG 549
J2594A Jet DirectEX Plus Combo ..... *(235)
J2592A Jet Direct 150X TPO 165
J2593A Jet DirectEX Plus 3 Combo 385
J2610B Advanced Stack 8 Port Hub 245
J3110A Jet Direct TP for 4000 249
J3111A Jet Direct Combo for 4000 295
J3128A Advanced Ethernet 8E Hub 185
J3175A AdvanceStack Switch 208T 1045
J3200A AdvanceStack Switching 12 Port 425
J3201A (J3200A) + SMNP (J3210A) ..... *(499)
J3202A AdvanceStack Switching 24 Port 825
J3203A (J3202A) + SMNP (J3210A) ..... *(899)
J3245A Advancestack Switch 800T 2145

IBM
Token Ring 16/4 Turbo ISA (72H3482) 245
Token Ring PCMCIA 16/4 Auto 325

intel
SALE
EE110TX 8 Port Fast Hub, non-stackable 459
EE110TX 12 Port 10/100 Dual Speed Hub ..... *(899)
EE110TX 24 Port Dual Speed Hub ..... *(1295)
EILA 8265 Pro/100 for EISA ..... *(199)
ES101-TX Switching Hub 10/100 ..... *(2099)
EtherExpress Pro/10 Cards:
- *PCLA 8210 BNC+TP oem / reg / 5-pk* ... *(65/95/325)
- *PCLA 8220 TP / 5-pk* ..... *(89/315)
- PCLA 8205 Flash BNC+AUI+TP 135
- PCLA 8215 Flash BNC+TP 125
In-Business 8 Port Hub 85
LANdesk Server Manager Pro (LDSMV251) 1185
LANdesk Virus Protect 4.0 945
LANdesk Workgroup Manager 25 Node 559
MBLA 1600 PCMCIA 10/100 ..... *(149)
PCLA 2451 Netport Express Pro/100 Ext, 3 Port 375
PCLA 3151 Netport Express Pro Int 295
PCLA 4451 Netport Express Pro/100 Ext, 1 Port 235
PILA 8460 Pro/100+ / 5-pk ..... *(59)/359
PILA 8480 Pro/100 Server Adapter 485

KINGSTON
Etherx 10BT PC Card 95
Etherx 10/100 Fast PCI 59

LANPRO
SALE
EN2000PXA Full Duplex Combo PnP ..... *(18)
EN5200PX PCI Combo ..... *(19)
EN9420TX 10/100TX PCI Card ..... *(29)
ER1204TX Fast HUB 4 Port 95
ER1208TX Fast HUB 8 Port 179
Fast 100 Hub 5 Port Stackable ..... *(225)
Fast 100 Hub 8 Port Desktop / Stackable ..... *(335/425)
Fast 100 Hub 12 Port ..... *(599)
Hub 5 Port (5TP) ..... *(49)
Hub 8 Port (8TP+BNC) ..... *(59)
Hub 16 Port (17TP+2AUI+2BNC) ..... *(145)
PS1000A Print Server Single Port 119

LINKSYS
10 Port Switch (2 Fast + 8TP) 545
Ether Fast 10/100 PCI Card 39
Ether Fast 10/100 PCMCIA 109
Fast 100TX 4 Port Hub Stackable ..... *(125)
Fast 100TX 5 Port Hub 99
Fast 100TX 8 Port Hub / Stackpro 179/289
Fast 100TX 16 Port Hub Stackpro 575
Fast Switch 10/100TX 2 Port 275

MEGAHERTZ
3CCFEM556 56k modem + 10/100 325
3CXEM556T 56k modem + 10BT 275
XJ10BC PCMCIA Ethernet Combo ..... *(135)
XJ10BT PCMCIA Ethernet TP ..... *(115)
XJEM336C Modem 33.6 + LAN Combo ..... *(259)
XJEM336T Modem 33.6 + LAN TP 265

MICRODYNE
EH800E 8 Port Hub ..... *(119)
EH1200E 12 Port Hub ..... *(175)
NE 10/100 PCI ..... *(99)
NE2500 ISA Combo PnP ..... *(19)
NE3210 32-bit Combo EISA 185
NE5500 32-bit Combo PCI ..... *(109)

MIROTEST
CD-Now for Netware - 25 / 50-user 489/695
Disc View Pro 265
Disc Serv (includes Disc View) 529

NOVELL
Intra Netware 4.11:
- *5 / 10 / 25-user* ..... *(695/1295/2095)
- 50 / 100 / 250-user 2895/3995/7295
- 500 / 1000-user 15995/30995
Intra Netware 4.11 Addition 10-user 895
Intra Netware for Small Business:
- Server + 5 License 659
- 1 / 5-user License 59/225
Lan Workplace 5.0 - Single / 10-user 195/1295
Netware Connect - 2 / 8 / 32-Ports 355/1375/3895
Netware Management Agents 2.1 415
Netware NFS v1.2C ..... *(1850)
Netware NFS Service 2.1 2195
NFS Client for Lan Workplace 205
Unixware Personal Edition v2.01 - CD ..... *(99)
Unixware SDK v2.1 - CD ..... *(75)

SHIVA
LanRover/2E Plus 3.5 Async TP v.34 1695
NetModem/E 28.8 Ether BNC + TP 1295

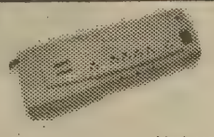
SMC
SALE
Ether EZ TP ISA (8416T) oem ..... *(58)
Elite Ultra 32 EISA Combo ..... *(195)
Etherpower PCI Combo (8432BT) oem ..... *(75)
Etherpower II 10/100 (9432TX) oem / 5-pk *(65)/335
EZ Hub 100TX 8 Port 635
Tiger Hub 100TX 12 Port 1195
Tiger Hub 3212TC (12TP+BNC+AUI) 349
Tiger Hub 3314T 14 Port ..... *(399)

WISECOM (5 YR WARRANTY)
H008CAT 8 Port Hub (8TP+AUI+BNC) ..... *(64)
H116CAT 16 Port (16TP+AUI+BNC) ..... *(139)
R310CT PCI 32-bit Combo PnP ..... *(49.95)
U210T NE2000 ISA Combo PnP 16

Xircom
CE3-10BC PCMCIA Combo 159
CE3-10BT TP, upgradable 135
CE3B-100BTX 10/100 PCMCIA 155
CEM33-BC 33.6 modem + LAN Combo ..... *(299)
CEM33-BT 33.6 modem + LAN TP ..... *(255)
CEM56-100BTX 56k modem + Fast LAN ..... *(299)
CEM56-100MD: with Mini Dock ..... *(305)
PE3-10BC Pocket Adapter Combo ..... *(279)
PE3-10BT Pocket Adapter TP ..... *(259)

CABLES & ACCESSORIES:
10BaseT, Cat. 3 plenum 1000' 145
Belden 8259, RG58 1000' 135
RG58 U - 500' / 1000' 49/79
RG58 A/U - 500' / 1000' 59/99
Twisted Pair 2-pair, PVC, Cat. 3 - 500' / 1000' 25/45
Twisted Pair 4-pair, PVC, Cat. 3
- 200' / 500' / 1000' 25/45/69
Twisted Pair 4-pair, PVC, Cat. 5
- 200' / 500' / 1000' 30/59/95
Custom-made Cables, Cross-Overs ..... Call

15. POWER SUPPLIES



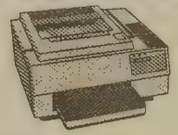
APC
BF-250 Back-UPS Office Kit ..... *(99) 115
BK-280 Back-UPS (200W), 2 out 99
BK-400 Back-UPS (300W) ..... *(125)
BK-450 Back-UPS (325W), 4 out 155
BK-600 Back-UPS (425W), 4 out 225
BP-280 Back-UPS Pro PnP, 2 out 139
BP-420 Back-UPS Pro PnP, 4 out 225
BP-650 Back-UPS Pro PnP, 4 out 259
BP-1000 Backup Pro, 6 out 375
ShareUPS AP9207 235
SU-420 Net 235
SU-620 Net 285
SU-700 Smart-Net (486, 586, FS), 4 out 365
SU-1000 Smart-Net (FS, WS), 6 out 475
SU-1400 Smart-Net (950W), 6 out 625
SU-2200 Smart-Net (1600W), 8 out 899
SU-3000 Smart-Net (2250W), 8 out 1645
SU-1000 RM Net / SU-1000XL Net 575/599
SU-1400 RM Net 739
SU-2200 RM 3U / SU-2200XL Net 1235/1195
SU-3000 RM 3U 1799
Powerchute Plus:
- for Novell 65
- for OS/2, LAN Server, 3Com 75
- for Unix / Xenix 99
- for Win & Win'95 / Win NT 55/69
Surge Arrest (PER 7) 17.99
Surge Arrest w. TEL (PER 7T) 22.99
Surge Network Strip (NET 7) 29.95
Surge Network Strip (NET 7T) 39.95
Surge Protector (P7) 9.99
Surge Station Net 8 / 8N 36/48
Surge Station Pro 8 / 8T2 / 8TV 32/39/49

PC POWER COOLING
CPUcool for Pentium® Pro (3.2") 22.95
CPUcool K1 for Pentium® II up to 450MHz 22.95
CPUcool Z1 for P-233 to P-333 (socket 7) 22.50
Silencer 230 Slim for Baby or Mid Tower 69
Silencer 230 for Full Tower 89
Silencer 270 for Full Tower 124
Silencer 270 Slim for Baby or Mid Tower 114
Silencer 235 ATX 84
Silencer 275 ATX 124
Standard 230 for Full Tower 85
Turbo Cool 300 ATX 126
Turbo Cool 300 for Full Tower 125
Turbo Cool 300 Slim for Baby or Mid Tower 115
Turbo Cool 400 ATX 199
Turbo Cool 400 Slim / for Full Tower ..... *(175/176)
Turbo Cool 450 for Full Tower (heavy duty) 285
Two-in-1 500 (slim, redundant) 215
Twinpower 900 (redundant) 895

OTHERS
250W for ATX 39
250W for Baby or Mid Tower, PS/2 35
300W UL for Full Tower, PS/2 45
300W for ATX UL 75
Kensington SmartSockets Basic Strip, 370 Joules 14.99
Kensington SmartSockets Premium, 520 Joules .. 22.99
RPT-600 300W Redundant for Tower 179

ACCESSORIES:
Battery Tester M-032 ..... 6.50
DMM: DT-890B (A,V,O,C,Hfe) 19.95
DMM: DT-830B (Adc,V,O,Hfe) pocket size 8.95
DMM: M-3900 (A,V,O,Hfe) big LCD 17.95
DMM: KT-7113 (A,V,O,C,Hfe) auto ranging 24.95
DMM: KT-7244 (A,V,O,F,Hfe) 21.95
DMM: ST-5308 (Adc,V,O,Hfe) battery test 11.95
Engine Tester KT-7181 (Dwell, Tacho) 18.95
Pocket Meter MF-133, 5 functions 6.95
Power Center Switching Systems 13.50
Test Probe / Tool Kit 1.99/7.95

16. PRINTERS & PLOTTERS



AVERY (ACCESSORIES)
#3110 Kids Rectangle Stickers 4.99
#3111 Kids Square Stickers 4.99
#3112 Kids Small Round Stickers 4.99
#3113 Kids Big Round Stickers 4.99
#3114 Kids Full Page Stickers 4.99
#3265 Greeting Cards Half-Fold 6.95
#3610 Kids Greeting Cards 5.45
#3611 Kids Post Cards 5.45
#3613 Kids Laminated I.D. Cards 5.95
#5610 Laser Printer Label 100pk (1"x2.6") 22.95
#5163 Laser Printer Label 100pk (2"x4") 23.95
#5267 Laser Printer Label (0.5"x1.75") 8.95
#8162 Inkjet White Address Label (1.33"x4") 4.79
#8167 Inkjet Return Address Label (0.5"x1.75") .. 4.75
#28371 Inkjet White Business Cards 10pk 4.69

BROTHER
HL-730DX True 600dpi, 6ppm, Laser 365
MFC-4550 5-in-1, 600dpi, Laser, Fax 699
MFC-6550 6-in-1, Fax/ Copy/ Scan/ Print etc. 969
MFC-7000FC 6-in-1 Fax/ Copy/ Scan etc. 979

Canon
BJC-80 Color 285
BJC-250 Color 159
BJC-4300 Inkjet, Color 199
BJC-4550 720x360dpi, 5ppm, 11"x17" 475
BJC-7004 Color 335

EPSON
FX-880 9-pin 295
FX-2170 9-pin, Wide, max. 6 copies 449
LQ-570+ 24-pin 259
LQ-870 24-pin, Par 455
LQ-2070 24-pin, Wide ..... *(389)
LQ-2170 24-pin, Wide 549
Stylus 400 Color, 720dpi, 3ppm ..... *(185)
Stylus 600 Color, 720x1440dpi, 6ppm ..... *(239)
Stylus 800 Color, 720x1440dpi, 8ppm ..... *(335)
Stylus 800N w. Ethernet Card ..... *(529)
Stylus 1520 Color, 1440x720dpi, fit 17"x22" 759
Stylus 3000 Color, 1440x720dpi, fit 13"x19" 1699
Stylus Photo (C209011), 720dpi ..... *(355)

Accessories:
(C823121) Local Talk for Stylus 145
(C823572) Multi-Ethernet for LQ & Stylus 325
Epson Ink Cartridges:
Black Ink for II & IIS (SO20047) 19.95
Black Ink for 400/ 500/ 600/ Photo 19.45
Black Ink for 400/ 800+ (SO20025) 10.95
Black Ink for 800 Color/ 1520 Color (SO20108) .. 22.45
Color Ink for II & IIS (SO20049) 29.95
Color Ink for 400/ 600/ 800/ 1520 ..... 22.95
Color Ink for Stylus Photo (SO20110) 19.95
Epson Paper:
Banner Kit for 1520 (C811011) 31.95
Banner Paper for 1500 (SO41102) 25.95
- Banner Paper Holder for 1500 (C811003) 24
Coated Letter Paper 720dpi (SO41062), 100 sheet 12.95
High Quality Glossy Paper (SO41072), 15 sheet . 24.95
High Quality Inkjet Letter (SO41111), 100 sheet . 8.95
Iron-On Paper (SE41001), 10 sheet 12.95
Photo Quality, 4x6, (SO41134), 20 sheet 7.45
Photo Quality, 11x17 (SO41070), 100 sheet 26.95
Photo Quality Glossy (SO41124), 20 sheet 10.95
Photo Quality Glossy 11x17 (SO41075), 10 sheet 38.95
Photo Quality Glossy 13x19 (SO41074), 10 sheet 49.95
Photo Quality Legal (SO41067), 100 sheet 17.45

HEWLETT PACKARD
Color Laser Jet 5 (C3961A) 3875
Color Laser Jet 5M (C3962A) 4945
Deskjet 670C (C5884A) 208
Deskjet 692C 245
Deskjet 720C 299
Deskjet 890CXi 379
Deskjet 1000CXi (C2673A), print size 4x6 - 11x17 415
Deskjet 1600C for PC & MAC 1299
Deskjet 1600CM Postscript for PC & MAC 1899
Laser Jet 4MV (B size) 2595
Laser Jet 5 / 5M / 5N 999/1525/1285
Laser Jet 5Si / 5SiMX 2349/3395
Laser Jet 6LXi ..... *(377) 389
Laser Jet 6PXi / 6MP 745/879
Laser Jet 3100Xi (C4177A) All-in-1 699
Laser Jet 4000 (C4118A), 2 trays 1099
Laser Jet 4000N (C4120A) JetDirect 1415
Laser Jet 4000T (C4119A), 3 trays ..... *(1195)

Laser Jet 4000TN (C4121A) JetDirect 1575
Laser Jet 5000 (C4110A), print size 11"x17" 1445
Laser Jet 5000N (C4111A), print size 11"x17" 1865
Mopier 5Si (C4176A) / w. Bundle 4445/6545
Office Jet 590 (C4645A) 4-in-1 399
Office Jet 630 (C5315A) 4-in-1 519
Office Jet Pro 1150C Color (C5300A) 759
Portable 340 (C2655A) 265
Portable 340CV 315

HP PLOTTERS:

Design Jet 430: D Size (C4713A) 1675
Design Jet 430: E Size (C4714A) 2495
Design Jet 450C D Size (C4715A) 1995
Design Jet 450C E Size (C4716A) 2895
Design Jet 750C+: D Size / E Size 4995/5695
Design Jet 755CM: E Size 8195
Design Jet 2000CP E Size (C4703A) 8295
Design Jet 2500CP E Size (C4704A), Ethernet 9995

Accessories:

C3169A: Postscript for 5Si 435
C3760A: Lower Cassette for 4V/ 4MV 325
C3762A: Duplex for 5Si/ 5SiMX 479
C3765A: Envelope Feeder for 5Si 379
C3918A: Postscript for 5/ 5N 335
C3920A: Duplex for 5/ 5N/ 5M 475
C3921A: 500 Sheet Feeder for 5 225
C3927A: Power Envelope Feeder for 5 259
C4123A: Duplex for 4000 289
C4137A: 16MB for 4000 145

HP Ink Cartridges:

51625A: Color for 500C/ 550C/ 560C 26.95
51626A: Black for 500/ 540/ 560 ..... 24.45
51629A: Black for 590/ 600/ 660 ..... 24.95
51640A: Black for 1200C 23.95
51640C: Cyan for 1200C 27.95
51640M: Magenta for 1200C 27.95
51640Y: Yellow for 1200C 27.95
51641A: Color for 870C/ 855C/ 1600C 28.95
51645A: Black for 870C/ 855C/ 1600C 26.95
51649A: Color for 590/ 660C 29.25
C3102A: Cyan for Color Laser Jet 32.95
C3103A: Yellow for Color Laser Jet 32.95
C3104A: Magenta for Color Laser Jet 32.95
C3105A: Black for Color Laser Jet 7.95

HP Paper:

92296T: Transparency Film for Laser Jet, Letter .. 17.95
C1812A: Greeting Card, Letter, 20 sheet 7.95
C1846A: Photo Paper, Letter, 20 sheet 9.95
C2974A: Glossy, Letter, for 5/ 5M, 50 sheet 39.95
C3850A: Opaque Bond, 36"x150' roll 24.95
C3877A: Coated Paper, 36"x150' roll 39.95
C5973A: Premium Glossy, Letter, 25 sheet 21.95
C5976A: Bright White Inkjet, Letter, 200 sheet 5.95
C6093A: Premium Photo 4"x5", 15 sheet 8.50

HP Toner Cartridges:

92274A: for 4L/ 4ML/ 4P 65
92275A: for IIP/ IIP+/ IIIP 74
92291A: for IIISi/ 4Si/ 4SiMX 129
92295A: for II/ IID/ III/ IIID 75
92298A: for 4/ 4M/ 4+/ 4M+/ 5/ 5M/ 5N 89
C3900A: for 4V/ 4MV 139
C3903A: for 5P/ 5MP/ 6P/ 6MP 75
C3906A: for 5L/ 5ML/ 6L 59
C3909A: for 5Si/ 5SiMX 179
C4127A: for 4000 ..... 79.95

IBM (NETWORK PRINTER)

#4312001: Laser, 600dpi, 4MB, 12ppm 1025
#4317001: Laser, 600dpi, 4MB, 17ppm 1365
#4324001: Laser, 600dpi, 4MB, 24ppm 2345

LEXMARK

Optra C Color, 600dpi, Postscript, 8MB, 3ppm 4495
Optra E 600dpi, 1MB, 6ppm 395
Optra S1250 1200dpi, 4MB, 12ppm 1045
*- with LAN (S1250N) ..... *(1245) 1299*
Optra S1650 1200dpi, 4MB, 16ppm 1295
- with LAN (S1650N) 1545
Optra S2450 1200dpi, 4MB, 24ppm, 11x17 2295
- with LAN (S2450N) 2595

NEC SALE

*Superscript 660+ Laser ($30 Rebate) ..... *(249)*
*Superscript 750C Color ($30 Rebate) ..... *(189)*
*Superscript 860 Laser ($50 Rebate) ..... *(389)*
*Superscript 1260 Laser, 600dpi, 12ppm ..... *(645)*

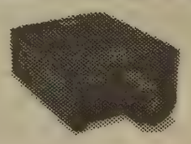
OKIDATA

ML184T 9-pin, Par, 300cps, max. 5 copies 235
*ML320T 9-pin, 290cps, max. 5 copies ..... *(315)*
ML390T 24-pin, 312cps, for Win & Win 32 345
*ML520 9-pin, 430cps ..... *(385)*
ML590 24-pin, 450cps, max. 5 copies 449
ML591 24-pin, Wide, max. 5 copies 625
*Office 44 4-in-1 ..... *(485)*
OkiJet 2020 600dpi 185
*OkiPage 4W Laser, 4ppm ..... *(199)*
*OkiPage 6E 600dpi, 6ppm ..... *(289)*
*OkiPage 6EX 600dpi, 2MB, 6ppm ..... *(399)*
OkiPage 16N Laser, 600dpi, 16ppm 889
*OL600E Laser, 600dpi, 6ppm ..... *(295)*
*OL810E Laser, 600x1200dpi, 8ppm ..... *(565)*
*OL1200 Laser, 600dpi, 2MB, 12ppm ..... *(949)*

SEIKO

Smart Label Printer EZ30 145
Smart Label Printer Pro SLP220 235

17. PROJECTOR



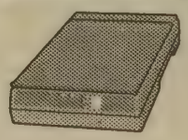
3M

Overhead M9100 AJB 289
Overhead M9200 AJC 399
Overhead M9550 AJH 615
Overhead M9700 AJJ 499

PROXIMA

Desktop DP5100 LCD 3499
Desktop DP5500 LCD 640x480, Zoom 4599
Ovation 810 8.4" LCD, 2M color, 640x480 1665
Ovation 944 10.4" LCD, 16.7M, 1280x1024 6395
Ovation+ 840 8.4" LCD, 16.7M, 800x600 2195
Ovation+ 846 10.4" LCD, 16.7M, 800x600 2695
Portable Overhead A653 3000 Lumens 475
Portable Overhead A655 4000 Lumens 799

18. SCANNER



ARTEC

A56E 30-bit 300x600dpi Parallel w. Photo Deluxe 89

EPSON

*Expression 636 36-bit Executive SCSI ..... *(699) 725*

HEWLETT PACKARD

ScanJet 5100CXi (C5193A) 285
*ScanJet 6100 (C6267A) ..... *(699) 745*
*- Auto Document Feeder (C6265A) ..... *(455)*
- Transparency (C6261A) *599*
*ScanJet Office 4P + ADF (C4135A) ..... *(595)*
ScanJet Personal 5S 195

LEO

LeoPlus L3 Parallel Flatbed 95

MICROTEK

*Scan Maker III w. TMA & Photoshop OCR ..... *(1399)*
Scan Maker E6Pro 1200dpi, Photoshop COR 499
Scan Maker V310 Parallel 145
Scan Maker V600 245
Scan Maker X6 Parallel 189
Slide Maker 35T+ 1800dpi, 16.8M color 725
Auto Document Feeder ADF600 365
Color Pagewiz for Win, 24-bit 159
Transparency Adapter for E3 / E6 ..... 285/285

STORM TECH

*Easy Photo Reader Parallel ..... *(115)*
*Easy Photo Smart Page ..... *(149)*

UMAX

*Astra 610P Win ..... *(139)*
*Astra 610S Photo Deluxe ..... *(149)*
*Astra 1200S Win Deluxe ..... *(249)*
*Astra 1200S Win Photoshop ..... *(445)*
Astra 1220P Parallel w. Photo Deluxe 205
Astra 1220S SCSI w. Photo Deluxe 229

VISIONEER

Paperport Strobe Parallel ($50 Rebate) 175
Paperport Deluxe for Win 32 (software) 69.95

19. TAPE BACKUP

AIWA

GD-B8000 8GB DDS-2 4mm SCSI Int 649
TD-S3200 TR-3 3.2GB Int 125

EXABYTE

*Eagle TR3 603003-004 3.2GB Int ..... *(145)*
EXB-8700LT 8mm 5-10GB Ext Drive 675
- with Arc Serve 899
Eliant 820S 8mm 7-14GB, Single Ended Int 1525
Eliant 820S 8mm 7-14GB, Single Ended Ext 1775
Mammoth 8900SL 8mm 20-40GB Int / Ext 2995/3245
210RK Automated 8mm Library (70-140GB) 6095

HEWLETT PACKARD

*C1534 4mm Dat. 2GB SCSI Int Drive ..... *(549)*
- w. Int Kit (C1525) / Ext Kit (C1520) 725/845
*C1536 4mm Dat. 2-4GB SCSI Int Drive ..... *(579)*
- w. Int Kit (C1526) / Ext Kit (C1521) 769/895
C1549A Surestore DLT 30GB Ext 3095
C1554 Dat. 24GB DDS-3 Int 985
- w. Int Kit (C1555) / Ext Kit (C1556) 1399/1545
C1599 Dat. 8GB DDS-2 Int 695
- w. Int Kit (C1528) / Ext Kit (C1529) ..... *(875)/1095
C4354A Colorado 5GB Int 215
C4361A Colorado 5GB Ext 255
C5644C Surestore T4i 4GB Int 359
C5645B Surestore T4e 4GB Ext 459
C5648A Dat. 24GB x 6 Int Autoloader 2595
Mounting Frame 5.25" for C1533/ C1554 ..... 27 ea.
Mounting Frame 5.25" for C1534/C1536/C1599 25 ea.

iomega

Ditto Max 7GB Int 195

NOVASTOR

*Novaback 4-in-1 for Win'95 & NT - FD ..... *(55)*
Novaback 5.0 for Win'95 & NT - CD 54

Seagate SALE

*CNR-4324RP 2-4GB SCSI Int 5.25" ..... *(499)*
*CNR-4326RP 8GB 4mm SCSI w. 5.25" rail ..... *(665)*

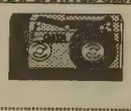
Software (Arcada):

Back Up for Win'95 65
Back Up Exec for Netware Workstation 7.0 98
Back Up Exec for Netware Enterprise 7.11 845
Back Up Exec for Netware Server 7.5 435
Back Up Exec for Netware 1 Server 25-user 335
Back Up Exec for Win NT Workstation 189
Back Up Exec for Win NT Enterprise 7.0 865
Back Up Exec for Win NT Server 7.0 439

SONY

LanBacker 7000: 8GB DDS-2 w. ArcServe Serve
Int / Ext 1095/1175
WanBacker 7000: 8GB DDS-2 w. ArcServe Enterprise
Int / Ext 1695/1795
WanBacker 9000: 24GB DDS-3 w. ArcServe Enterprise
Int / Ext 2150/2175

TAPE CARTRIDGES:



3M - 4mm 90M 7.50
- 8mm 112M 6.95
- Travan TR-1 (800MB) 23.50
- Travan TR-3 (1600MB) 24.95
- Travan TR-4 (1600MB) 26.50
EXABYTE - 8mm 112M, 5GB 9.95
- 8mm 160MXL (for XL drives) 15.95
- 18C 8mm Cleaning Cartridge 19.95
HP - 92283B: 4mm 90M (2GB) / 5-pk 7.50/35
- 92283K: 4mm Cleaning Tape 2-pk 21.95
- 92300A: 4mm 120M (4GB) / 5-pk 12.95/59
- C1517A: 4mm 125M DDS-3 (12GB) 27.99
- C1570A: 4mm 125M Autoloader 165
- C1572A: 4mm 120M Autoloader 119
- C4429: 5GB Single 25
- C4429D: 5GB 5-pk 119
*MAXELL - 4mm 90M Dat. ..... *(7.99)*
SONY - 4mm 90M for DDS-1 ..... 7.95
- 4mm 120M for DDS-2 ..... 13.95
- 4mm 125M for DDS-3 ..... 27.95

20. VGA CARDS

ATI

*All-in-1 Wonder 4MB PCI ..... *(165)*
All-in-1 Wonder Pro 4MB AGP / PCI 259/245
All-in-1 Wonder Pro 8MB AGP oem / reg 265/299
All-in-1 Wonder Pro 8MB PCI oem / reg 245/289
Xpert@Play 4MB AGP oem / reg 109/119
Xpert@Play 4MB PCI oem / reg 105/115
Xpert@Play 8MB AGP oem 135
Xpert@Play 8MB PCI oem / reg 125/135
Xpert@Work 4MB AGP oem / reg 95/105
Xpert@Work 4MB PCI oem / reg 89/99
Xpert@Work 8MB AGP oem 119
Xpert@Work 8MB PCI oem / reg 115/125
4MB upgrd for Xpert@Play & Xpert@Work 99

ASUS

V3000 4MB AGP 99

DIAMOND

Fire GL 1000 Pro 4MB AGP oem 149
Fire GL 1000 Pro 4MB PCI oem 129
*Fire GL 1000 Pro 8MB AGP oem ..... *(185)*
*Fire GL 1000 Pro 8MB PCI oem ..... *(165)*
Monster 3D 4MB PCI oem / reg 125/175
*Monster II (Voodoo II) 8MB PCI oem ..... *(209)*
Monster II (Voodoo II) 12MB PCI oem 295
Stealth 2000 Pro 2MB PCI 59
Stealth 3D 4000 4MB AGP oem 79
Stealth II 3D 4MB PCI oem 99
Viper V330 4MB AGP oem / reg ..... *(125)/189
*Viper V330 4MB PCI oem / reg ..... *(125/155)*

DYNAMIC PICTURES

Oxygen 102 8MB SDRAM PCI for Win NT 385
Oxygen 202 16MB SDRAM PCI for Win NT 879
Oxygen 402 32MB SDRAM PCI for Win NT 1759

HERCULES

*Stingray 128 3D 8MB EDO reg ..... *(229)*

IMS

Twinturbo 128P VRAM PCI w. 2MB / 4MB ... 195/265
Twinturbo 128P VRAM 8MB PCI 395

LEADTEK

WinFast 3D L2300 8MB AGP / PCI 249/229

matrox

Millennium II 4MB AGP oem / reg 139/149
Millennium II 4MB PCI oem / reg 137/145
Millennium II 8MB AGP oem 199
*Millennium II 8MB PCI oem / reg ..... *(189/199)*
Mystique 220 4MB PCI oem / reg 89/95
Rainbow Runner Studio (upgrd for Mystique) 165
Rainbow Runner Studio (for Millennium II) 199
Rainbow Runner Television 89
*M3D 4MB upgrade ($20 Rebate) ..... *(75)*
Memory Upgrade (for Millennium II):
- 4MB / 8MB / 12MB 99/175/249
*Video, Graphics & TV Combo Kit ..... *(259)*

NUMBER NINE

*Imagine 128 Series II 4MB EDO PCI ..... *(109)*
*Revolution 3D 128 4MB AGP oem / PCI oem (purchase w. systems) ..... *(115/109)*
Revolution 3D 128 4MB AGP reg 135
Revolution 3D 128 4MB PCI reg 129
*Revolution 3D 128 8MB AGP oem / PCI oem (purchase w. systems) ..... *(169/165)*
Revolution 3D 128 8MB PCI reg 185

OTHERS

Boca Voyage Movie Player Accelerator 285
InterGraph Intense 3D Voodoo 6MB 225
J-Bond JDC-9750 4MB AGP 65
STB Velocity 128 AGP (no TV), boxed oem 129
Televiewer Plus for Win 3.11 & '95 only 145
Tvator Pro PC/Mac VGA to NTSC Scan Converter 119
Tvator Remote Pro VGA to NTSC Scan Converter 229

21. VIDEO / DIGITAL CAMERA

AGFA

Ephoto 307 Digital Camera 339
Ephoto 1280 859

BEST DATA

Digital Color Camera DDC-100 125
Digital Color HCC-100 w. Photo Edit 199

Canon

Powershot 350 LCD 475
Powershot 600 LCD 675

CASIO

QV-11 Digital Camera 285
QV-200 Digital Camera 399
QV-300 Digital Camera 665

EPSON

Photo PC-500 Digital Camera 345
*- w. Photo Pix LCD Monitor ..... *(459)*
Photo PC-550 285
*Photo PC-600 1024x768 ..... *(665)*

Kodak

*DC50 Digital Camera Zoom Lens ..... *(465)*
DC120 Camera 1.6" Color 735
DC210 Zoom Camera 839
DVC300 Digital Video Camera 149
DVC323 Digital Video Camera 169

OLMPUS

D220L 640x480 475
D320L 1024x768 675
D600L 1280x1024, 3X Zoom 1195

PANASONIC

KXL-600A Digital Camera 225

SONY

DSC-F1 Digital Still 495
Mavica MVCFD-5 Digital Camera 489
Mavica MVCFD-7 w. Zoom 685

UMAX

Photorun Digital Camera DT for Win'95 239
Photorun Digital Camera LP for Win'95 199

**(sale price) ..... SPECIALS, limited to stock on hand*
Prices subject to change without notice.

http://www.centralcomputer.com for current prices & product catalog

SOFTWARE

PC SOFTWARE

Adobe
Acrobat 3.0.1 189
Acrobat Capture 2.0 599
FrameMakr 5.5 / (special) ..... 745/*(499)
- upgrade 165
Illustrator 7.0 for Win 32 / (special) ..... 365/*(265)
PageMaker 6.5 for Win 32 / (special) ..... 545/*(295)
Photo Deluxe 2.0 45
Photoshop 4.0 / (special) ..... 549/*(399)
Premier 4.2 for Win / (special) ..... 499/*(299)

AUTODESK
AutoCAD Lite '97 405
Autosketch 2.1 for Win & Win'95 89
Symbols '97 87

BORLAND
C++ 5.0 for Dos, Win & Win 32 - CD 325
C++ 5.0 Developer Suite 425
C++ Builder 1.0 Standard / Professional 89/525
*Delphi Developer 2 Kit / upgrade ..... *(395/255)*
Delphi 3 / upgrade 499/249
*Paradox 5.0 for Win ..... *(99)*
Paradox 7.0 for Win'95 & NT 265
Turbo Assembly 5.0 for Win'95 115
Visual dBase 5.5 for Win & Win'95 269

COREL
Corel Draw 4.0 (2CD) 69
*Corel Draw 5.0 for Win 3.11 - CD ..... *(195)*
*Corel Draw 7.0 for Win'95 & NT ..... *(399)*
Corel Draw 8 - CD / upgrade 425/225
Corel Flow / Corel Flow 3 ..... *(59)/129
Corel XARA 179
Lumiere Suite 69
*Perfect Office Professional 7.0 - CD ..... *(75)*
Ventura 7 for Win'95 - CD 549

DELRINA
*Comm Server ..... *(39)*
*Comm Suite 2.1 ..... *(65)*
*Cyberjack 7 for Win'95 ..... *(29)*
*WinFax Pro 4.1 for Network 10-user ..... *(499)*

IBM
Anti-Virus Desktop 2.52 oem 24
OS/2 Warp 4.0 Single - WS / Server 195/539
Via Voice for Win 32 oem / reg 39.95/89
Via Voice Gold for Win 32 138

INTUIT
Quick Basic '98 45
Quicken Deluxe '98 - CD 59.95
*Quicken Family Lawyer - CD ..... *(39)*
Quicken Financial Suite '98 oem / reg 33/86.95
Quickbook 5.0 / Professional 5.0 ..... 97/185

LOTUS
1-2-3 5.0 for Win / competitive upgrd ..... 299/*(75)
*1-2-3 97 for Win 32 / upgrade ..... *(269/89)*
cc:Mail 6.1 Systems Pack Server 134
cc:Mail 8.0 Advanced System Pack 465
cc:Mail 8.0 Client for Win 32 135
cc:Mail Mobile E-Mail 7.0 for Win'95 & NT 115
Organizer 97 for Win'95 75
*Smart Suite 97 for Win 32 oem / reg ..... *(45/325)*

MICROGRAFX
ABC FlowCharter 4.0 299
ABC Graphics Suite Live 6.0 - CD 275
Designer Power Pack - CD 335
Designer Tech Live 4.1 - CD 399
FlowCharter Live 7.0 - CD 279
Graphic Suite #2 for Win'95 315
Picture Publisher Live 5.0 - CD 135
Web Tricity 135

Microsoft
Access 97 / upgrade 299/99
Access Developer's Kit for Win'95 459
Back Office 2.5 Client 5-user 1199
Back Office Resource Kit pt.1 / pt.2 ..... 59/95
Back Office Server 2.5 2295
Excel 97 / upgrade 299/95
Exchange Server 5.5 - 5 Client / 10 Client 899/1245
Frontpage 98 135
Home Essential 98 upgrade 94
Office Prof. 97 + Bookshelf - CD 529
Office 97 Small Business Edition 449
Office 97 Standard 445
PC Mail Server 3.5 10-user 445
Picture-It 2.0 for Win'95 47
*Power Point 7.0 / upgrade ..... *(299/98)*
Project 98 for Win'95 445
Proxy Server 925
Publisher 98 Deluxe - CD 119
Services for Netware (add-on for Win NT 4.0) 145
SNA NT Server 5-user 395
SNA NT Workstation 199
SQL NT Server 6.5 5-user 1299
SQL NT Workstation 6.5 475
SQL Server Internet Connection 2795
System MGMT Server - 5 / 10 Client 825/1045
Visual Basic Enterprise 5.0 1095
- upgrade 625
Visual Basic Professional 5.0 449
Visual C++ Enterprise 5.0 1089
Visual C++ Professional 5.0 455
Visual Fox Pro Professional 5.0 / upgrd 449/235
Visual Fox Pro Standard 3.0 for Win 189
Visual InterDev. 459
Visual J++ Pro 87
Visual Source Save 5.0 / upgrade 475/95
Visual Studio Professional 925
Windows '95 OSR v2.5 oem (for new PC) 95
Windows '95 OSR v2.5 oem + Plus (for new PC) . 119
Windows for Workgroups 135
*Win NT 4.0 Server 5-user / 10-user ..... *(695/995)*
Win NT 4.0 Workstation - CD 285
Word 97 / upgrade 299/78

QUARTERDECK
Cleansweep Deluxe for Win'95 49
*Hijaak Professional 4.0 for Win'95 ..... *(89)*
Internet Suite 2.0 37
MagnaRam 2.0 for Win 3.11 & Win'95 24
Procomm Plus 4.5 for Win32 - CD 135
Qemm 8.0 for Win'95 63
Total Web 86
Web Author 2.5 for Win'95 45
Web Compass 2.0 46
Zip-It for Win'95 37

SYMANTEC
ACT! 3.0 for Win'95 & NT 175
C++ 7.5 for Win'95 & NT 69
For Your Eyes Only 75
Norton Adminstrator Suite 10-user 525
Norton Anti-Virus Deluxe 4.0 67
*Norton Crashguard ..... *(44)*
*Norton Desktop 3.0 for Win oem / reg ..... *(45/99)*
Norton Disklock 3.5 for Dos / Win - CD 79
Norton Healthy PC 28
Norton NT Tools 47
Norton PC Handyman 48
*Norton Uninstall Deluxe ..... *(36)*
Norton Utilities '95 v3.0 ..... 69.95
Norton Utilities 8.0 for Dos & Win 79
PC Anywhere Remote & Host 8.0 Win'95 & NT .. 135
Visual Cafe 2.0 for Java Web Development 89
Visual Cafe 2.0 Database Development 459
Visual Cafe 2.0 Professional Development 275

OTHERS
Caere: Omnipage Professional 8.0 / upgrade .. 465/125
Cakewalk Home Studio 6.0 85
Cakewalk Professional 6.0 165
Cakewalk Professional Audio Deluxe 285
Claris: File Maker Pro 4.0 for Win'95 & NT 179
- competitive upgrade 95
Claris: Works 4.0 for Win'95 49
Eudora Pro 4.0 - Single / 5-user 39/185
FastBack Plus 6.0 119
Fractal Design Painter 5.0 / upgrade 265/89
Kai's Photo Soap 45
Kai's Power Tools 3.0 for Win'95 & NT 119
Kai's Power Goo for Win 32 45
Laplink for Win'95 129
QA Plus 7.1 for Win'95 59
Quark XPress 4.0 735
Sidekick 98 48
Uninstaller 4.5 for Win 32 39
Visio 5.0 for Win & Win'95 135
- Academic version 95
Visio 5.0 Professional / upgrade 299/136
- Academic version 199
Visio 5.0 Technical 298
Visio Intelli CAD '98 325

CD TITLES

NEW ARRIVALS
Aquazone 24.95
Battle Zone 38
Blade Runner 34
Cabela's Big Game Hunter 19.95
Caesar Palace 29.95
Catz II / Dogz II ..... 19.95 ea.
Deer Hunter / Duck Hunter / Turkey Hunter 19.95 ea.
Die by the Sword 39
F-15 Jane 37
F-22 Raptor (iF-22) 37.95
Frogger 37
Grand Theft Auto 39
Hot Rod Burnout Championship Drag Racing 38
Jet Fighter III 29.95
Key Clipart 25,000 14
Last Bronx (Sega, $20 Rebate) 29.95
Liberation Day 29.95
Linux Utilities 42
M1 Tank Platoon 2 39
Mastermind 19.95
Panzer 44 39
Power Boat Racing 39
ProBowl 3D 19.95
Puzzle Madness 25
Red Baron II 35
Quake II 36
Sim Safari 39.95
Sorry! 21.95
StarCraft 39.95
Star Wars: Rebellion 39.95
Steel Panthers III 24.95
Streets of Sim City 37
Tex Murphy Overseer 39.95
Tomb Raider II / Gold 34.95/27
Tonka Garage (age 5+) 29.95
Total Fonts '98 12
Touring Car Championship (Sega, $20 Rebate) .. 29.95
Thunder Truck Rally 49
Triple Play '99 36
Turbo Linux v1.2 - 2CD (Mar'98) 19
Ultim@te Race Pro 42.95
X Files Unrestricted Access 29.95

BRODERBUND
3D Home Architech 58
Arthur's Reading Race (age 3-7) 32
Click-Art 40,000 Starter Image Pak 24
Handwritten Font 36
Incredible 65,000 Image Pak 52
*Just Grandma & Me MPC & MAC ..... *(24)*
*Kid Pix Studio ..... *(29)*
Learn the Art of Magic 36
Orly's Draw-a-Picture 34.99
Printshop Live Mail 33
Printshop Premier 5.0 52

Microsoft (HOME SERIES)
3D Movie Maker (age 8+) oem 9
A Bridge Too Far 46
Age of Empires 45
Bookshelf '98 45
Creative Writer 2 14
Encarta '98 / Deluxe 46/69
Expedia Streets '98 / Deluxe 45/64
Expedia Trip Planner '98 37
Explorapedia - World of Nature 29
Explorapedia - World of People 29
Flight Simulator 98 ..... 49.95
Fury 3 38
Goosebumps 38
Greetings Workshop Deluxe 2.0 42
Julia Child Home Cooking oem / reg 19/29
*Magic School Bus - Human Body ..... *(35)*
Money '98 / Financial Suite 24/46
NBA Full Court Press 37
*Space Simulator ..... *(39.95)*

TWINBRIDGE
*Asian Bridge (chinese partner internet) ..... *(59)*
Asian Viewer 27
*Chinese Partner 4.5 for Win & Win'95 ..... *(165)*
*Chinese Suite for Internet ..... *(179)*
English - Chinese Dictionary 39.95
*Japanese Partner 4.5 for Win'95 ..... *(175)*
*Korean Partner 4.5 for Win'95 ..... *(95)*
*Wisdom Pen v2.5 + Chinese Partner Lite ..... *(139)*

WALNUT CREEK
Ada CD Rom (Jun'97) 21
ASME's Mechanical Engineering Toolkit (Dec'97) ... 26
C/C++ User Group Library (Aug'97) 26
CICA 32 for Win'95 & Win NT (Apr'98) 19.95
Clipart Cornucopia (Mar'98) 17
Free BSD 2.2.5 (Nov'97) / w. Book 22/32
G N U Tools++ (Sept'97) 23
Internet Info (Dec'97) 12.95
Linux REDhat 5.0 (Feb'98) 21.95
Linux Toolkit 6CD (Jun'97) 21
Linux Slackware 3.4 (Nov'97) 18
QRZ Ham Radio vol.11 (Mar'98) 14
Turbo Business Apps for Linux 26.95
Turbo Games++ for Linux vol.4 ..... 22.95
Python Toolkit (Jun'97) 22
Unix Freeware (Jan'98) 27.95
X2FTP (Jan'98) 23.95

REFERENCE

ART
3D Fonts 13
101 Dalmations Print Studio 25
American Greetings Create-a-Card Plus 27
Christian Diese Lassen - Master Artists of the Sea .. 29
Disney's Magic Artist 37
Expert: Clipart Fonts 16
Hercules Print Studio 24
Painters Painting 26
Print Artisi 4.0 Platinum oem 31
Printmaster Gold 4.0 Bonus Pack 22
Ray Dream Studio (Fractal Design) 37
Water Color My Way (Jack Reid) 19.95
Winnie the Pooh Print Studio 25
Wishbone Print Tricks 24

ATLAS / TRAVEL
Exploring America's National Park 14.99
Himalayas Mountains 29
Key Master Maps 28
Precision Mapping Streets 3.0 45
See the World by Train 29.95
Street Atlas 5.0 for Win & Win32 42
Walt Disney World Explorer 38.95
World Atlas + Almanac 6.0 13

BIBLE
Bible Rom - Creation / Moses / Noah's Ark / Exodus / Joshua ..... 14 each
Bible Study & Games II 13
Holy Bible for Dos / Win'95 ..... 16/15.95
Illustrated Holy Bible 17
Interactive Children's Bible 16
King James Bible 11
Multimedia Family Bible 12
New Family Bible for PC & MAC 18
Play n' Learn Bible II 13
Proverbs Screen Saver 11
Quick Verse 3.0 (King James) 11

DICTIONARY / STUDY AIDS
Pro-1 Series:
- Calculas II / Biology 14/14
- Chemistry / Electronics 14/43
- Fractions / Geometry 14/14
- Math II / Middleschool Grammar 39/14
- Physics / Probability & Statistics 14/14
- Science 4CD Set / Trigonometry 38/14
SAT/ ACT Deluxe '98 46
Ultimate Speed Reader 33
Visual Dictionary (talking edition) 35.95

INTERNET

Sirius

Get Sirius for $5! 2 Months FREE.
Try the ISP rated Best of the Bay. Use Internet service from Sirius Connections, the brightest star in cyberspace, for only $5. No registration fee and 2 months free. CDs for start-up available at any of our stores. Offer good for new subscribers only.

visit our stores for details

Expert: Internet Tutorial 15
Great Web Art & Tools 22
Hot Dog Web Editor 9.95
HTML Template Master 23.95
Internet Shop Builder 69
JAVA Starter Kit 35
Oil Change oem / reg 27/34
Web Max 34.95
Web Sleuth 34.95

UTILITIES
C/C++ Super Library 13
Complete Win NT Encyclopedia 17
Delphi Super Library 13
Electronics 2000 15
Fox Pro Super Library 13
Netware Super Library 15
Night Owl v.21 / v.24 ..... 19.95/21
Visual Basic Source Code & Utilities 12

4000+ CD TITLES IN STOCK
Visit Our Stores or Website For Complete Listings

**(sale price) ..... SPECIALS, limited to stock on hand*
Prices subject to change without notice.

http://www.centralcomputer.com for current prices & product catalog

continued from page 58

line drawing of a steaming cup of coffee surrounded by thirteen drops of sweat against a red background.

Hapless collected his conference badge and rode the escalator down to the main concourse. At the foot of the escalator a scruffy man in a faded tie-dye shirt held a cardboard sign proclaiming his three years of Java experience and need for a job.

Hapless stepped off the escalator and headed first for the exhibition hall. The vendor booths were strangely egalitarian: All were roughly the same size and featured generic JavaOne signs with each company's name. To all appearances, Microsoft and Metamata were companies of equal size.

The exception to all this was the JavaSoft pavilion at the center of the exhibit floor, a small forest of black pedestals on a black carpet. Workstations were in evidence everywhere, staffed by JavaSoft representatives in black polo shirts. Perhaps, Hapless thought, Darth Vader has launched a second career designing displays for trade shows.

Hapless wandered about the exhibits trading a few seconds of attention here and there for trinkets. He was disappointed to find that most of the companies present were software vendors or computer companies. He looked in vain for Java-enabled home appliances.

Leaving the exhibit hall, Hapless got in line to collect his Java Ring. If there aren't yet any Java-enabled refrigerators, Hapless could at least take some comfort in Java-enabled jewelry. The Java Ring is a "secure, durable, wearable Java-powered electronic token," which is to say, a stainless steel ring containing a button that is actually a single-chip microcomputer running Java. The i-button computers are a product of Dallas Semiconductor.

> Hapless collected his conference badge and rode the escalator down to the main concourse. At the foot of the escalator a scruffy man in a faded tie-dye shirt held a cardboard sign proclaiming his three years of Java experience and need for a job.

Having received his ring, Hapless had no idea what to do with it. He slipped it on his finger and stepped into a stream of people headed for the next round of conference presentations.

Before long he found himself in a cavernous room set up for an audience of several thousand. A hefty sound system with speakers throughout the large hall belted out a pleasant, jumpy instrumental tune that Hapless guessed might be Haitian or West African.

The far end of the room was dominated by an enormous video screen. In front of the screen, Hapless could barely make out someone standing in a bright light at what must be the speaker's podium. On either side of the stage there were screens on which the speaker's slides would be projected. Midway between Hapless and the podium, another array of projection screens and sound equipment relayed the spectacle to the back of the hall. And the hall was nearly full.

6 Reasons Why You'll Want A Portable Instead Of A Laptop or Desktop

- Higher & Clearer Screen Resolution Than A Laptop (Up To 1024x768)!
- Expandability Up To 8 Expansion Slots To Customize Your System; As Good As A Desktop!
- Much Sturdier Construction & More Reliable Than a Laptop!
- Portable Weighs Only 20lbs Easy to Carry With You!
- Easier & Less Expensive To Upgrade & Repair Than A Laptop!
- Takes A Lot Less Deskspace Than a Desktop, Almost As Little Space as a Laptop!

Visit Our Web Site! www.ssengineering.com

COLOR/B&W LUNCHBOX PORTABLE
- 4 Drive Bays
- 8 Expansion Slots
- 800x600 Res TFT Display
- 10.4" Active Color LCD
- 2 MB LCD SVGA Card
- Super Durable ABS Case
- Supports Simultaneous Display
- Optional Built-In Multimedia Speakers

USE YOUR NEW PORTABLE FOR:
- PLAIN PORTABILITY
- MULTIMEDIA
- BACK-UP SERVER
- PORTABLE NT SERVER
- PORTABLE FILE SERVER
- SPECIAL APPLICATION w/CUSTOM ADD-ON CARD
- TEST EQUIPMENT
- MEDICAL EQUIPMENT
- NEW PRODUCT DEMOS

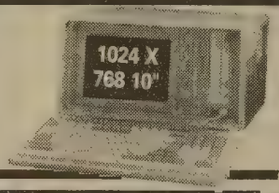
Call For Latest Prices & Custom Configurations

PENTIUM II 233/266/300
PENTIUM 166/200/233 MMX
PENTIUM 100-200MHz
PENTIUM PRO 180-200MHz

RACKMOUNT INDUSTRIAL PC
- 19" 5U Rackmount
- 8 Expansion Slots
- 10" SVGA SONY Trinitron Color Monitor
- 3 Drive Bays
- 250 W PS 100/200v
- Security Access Door
- Color Coded 12 Function Key Pad Available
- Slide Rail
- Vibration Clamps

CALL FOR PRICES & CUSTOM CONFIGURATIONS

SVGA SONY TRINITRON CRT PORTABLE
- 10" Color Flat Screen
- 4 MB RAM (Exp 64 MB)
- 540 MB IDE Hard Drive
- TEAC 1.44 MB Floppy
- 2 Serial/Parallel Ports
- SVGA Card w/1 MB
- 6 Expansion Slots
- Deluxe Carrying Bag

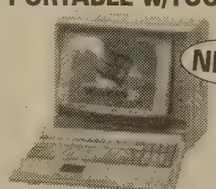


DESKTOP MONTHLY SPECIAL

PENTIUM PRO® 180/200 MHz ..... *CALL
PENTIUM®/PENTIUM®MMX/100/120/133/150/166/200 MHz ..... CALL
Pentium II 233/266/300 ..... CALL

All Systems Above Include:
- 32MB & UP RAM
- 3GB IDE Hard Drive & Up
- Teac 1.44 MB Floppy Drive
- SVGA Monitor (1280x1024, 28 dpi)
- SVGA Video Card w/2 MB
- IDE CD-ROM Drive
- Sound Card
- Enhanced 104 Keyboard
- Mini Tower Case
- 3-Button Mouse

NEW 12.1" TFT ACTIVE MATRIX COLOR LCD PORTABLE w/TOUCH PAD



- 7 Slots, 4 Drive Bays
- 4 MB Video Card
- 800x600 or 1024x768 Res.
- AT/Baby AT & ATX Motherboard Platform
- Built-In Touchpad Mouse
- Built-In Multimedia Speakers
- Super Durable ABS Case

ALL-IN-ONE LAN PC INTERNET WORKSTATION

Fully Loaded w/ Your Choice of CPU & HDD w/ 14" LCD

MONITORS
- SONY 10" TRINITRON COLOR DESKTOP MONITOR
- .26 DOT PITCH W/CARRYING HANDLE

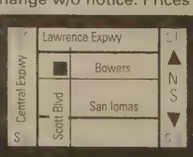
COLOR LCD TFT NEW!!
- 13.3" & UP LCD Screen 1024x768 Res.
- AT/Baby AT & ATX Motherboard Platform
- VGA Conversion board to use standard 3D Video Card

Prices subject to change w/o notice. Prices reflect cash discount.

DEALER PRICING & QUANTITY PRICING AVAILABLE

STORAGE SYSTEM ENGINEERING SERVICE

3350 Scott Blvd., Building 19, Suite 1902
(near Bowers Ave.) Santa Clara, CA 95054



408-727-6040
FAX: 408-727-6042
Hours: 10am-6:30pm M-F
www.ssengineering.com

Your Source For Reliable Computers & Peripherals Since 1983

BENiTEK USA COMPUTER

1671B N. Capitol Ave., San Jose CA 95132
Tel: (408) 254-3750 * Fax: (408) 254-7591
Email: benitek@AOL.COM
http://member.aol.com/benitek/benitek.html

Hours:
Mon-Fri 9:30 - 6:00
Sat 10:30 - 5:00

PENTIUM II BX SYSTEMS

- *Intel Seattle 440 BX MBoard or Asus P2B98-440BX MBoard w/ Accelerated Graphics Port.
- 512K L2 Pipelined Burst
- 64 MB SDRAM 10ns
- TEAC 1 44 Floppy Drive
- 6.40GB EIDE Ultra DMA
- EIDE PCI built-in I/O 16550
- Diamond Fire Pro 1000 AGP w/ 8MB SGRAM
- ATX Medium Tower 250W
- KeytronicWin95 keyboard
- Microsoft PS2 IntelliMouse
- Toshiba 32x CD-ROM
- PCI Audio Stereo Sound
- Yamaha M7 speakers
- US Robotics 56K
- Free Power Surge &CPU fan
- *Windows 95C IE4 CDManual
- Impression 7plus .27 17" Monitor

Pentium®II Processor

400MHz MMX	$2270
350MHz MMX	2068
333MHz MMX	1963
300MHz MMX	1836

PENTIUM II LX SYSTEMS

- *Intel Atlanta AL440 LX MBoard or Asus P2L97-440LX MBoard w/ Accelerated Graphics Port.
- 512K L2 Pipelined Burst
- 64 MB SDRAM 10ns
- TEAC 1.44 Floppy Drive
- 4.30GB EIDE Ultra DMA
- EIDE PCI built-in I/O 16550
- Diamond Fire Pro 1000 AGP w/ 8MB SGRAM
- ATX Medium Tower 250W
- KeytronicWin95 keyboard
- Microsoft PS2 IntelliMouse
- Toshiba 32x CD-ROM
- Yamaha Stereo Sound
- Yamaha M7 speakers
- US Robotics 56K
- Free Power Surge &CPU fan
- *Windows 95C IE4 CDManual
- Impression 7plus .27 17" Monitor

Pentium®II Processor

333MHz MMX	$1824
300MHz MMX	1697
266MHz MMX	1580
233MHz MMX	1537

ANCHORAGE SYSTEMS

- Intel AnchorageTX PCI MB
- 512K Pipelined Burst Cache
- 32 MB SDRAM 10ns
- TEAC 1.44 Floppy Drive
- 4.30GB EIDE UltraDMA/33 HD
- EIDE PCI built-in I/O 16550
- *Diamond Stealth 64 3000 PCI 3D w/ 4MB VRAM
- ATX Medium Tower 250W
- Mitsumi PS2 95 keyboard
- Logitech Mouse w/ Pad
- Toshiba 24x EIDE CD-ROM
- Yamaha Stereo Sound
- 180 watt Speakers
- *Dianond 56Kvoice Faxmodem
- Free Power Surge+CPU fan
- *Windows 95C IE4 CDManual
- MGC 15".28 Digital Monitor

Pentium® Processor

233 MHz MMX	$1129
200 MHx MMX	$1104
166 MHz MMX	$1094
133 MHz MMX	$1077
100 MHx MMX	$1050
90 MHz MMX	$999

ASUS TX97 SYSTEMS

- Asus Triton TX97 PCI MB
- 512K Pipelined Burst Cache
- 32 MB EDO 60ns RAM
- TEAC 1.44 Floppy Drive
- *2.60GB EIDE UltraDMA/33 HD
- EIDE PCI built-in I/O 16550
- *Diamond Fire 1000 Pro PCI 3D w/ 4MB SGRAM
- Medium Tower Case
- 104 Win95 keyboard
- Logitech Mouse w/ Pad
- Toshiba 24x IDE CDROM
- Yamaha Stereo Sound
- 120 watt Stereo speakers
- 33.6 fax modem
- Free Power Surge+CPU fan
- *Windows 95C IE4 CDManual
- MGC 15".28 Digital Monitor

K6 AMD Processor

233 MHz MMX	$981
200 MHz MMX	$972
166 MHz MMX	$950

Pentium® Processor

233 MHz MMX	$1021
200 MHx MMX	$996
166 MHz MMX	$990

Best Buy Systems

- Triton TX PCI MotherBoard
- 512K Pipelined Burst Cache
- 32 MB EDO 60ns RAM
- TEAC 1.44 Floppy Drive
- 2.60 GB IDE Hard Drive
- EIDE PCI built-in I/O 16550
- Diamond Stealth 64 3000 PCI 3D w/ 4MB VRAM
- Mini Tower w/LED 230W
- 104 Win95 keyboard
- Logitech Mouse w/Pad
- Creative Labs 24x CDROM
- Yamaha Stereo Sound
- 33.6 fax modem
- 120 watt Stereo speakers
- Free Power Surge
- *Windows 95C IE4 CDManual
- MGC 14".28 Monitor

Pentium® Processor

233 MHz MMX	921
200 MHz MMX	896
166 MHz MMX	890
133 MHz	870
100 MHz	850
AMD K6-233	881
AMD K6-200	872
AMD K6-166	850

SPECIAL

PENTIUM® II 233 MMX
24x MULTIMEDIA
Intel Atlanta Mboard

- Pentium® II 233 MHz MMX CPU
- **32 MB SDRAM 10ns**
- EIDE PCI w/I/O 16550 built-in
- **4.30 GB Ultra DMA33 HDisk**
- TEAC 1.44 Floppy Drive
- **Diamond Fire 1000 Pro AGP 8MB**
- **MGC 15".28 Digital Monitor**
- ATX Mid Tower w/ 250 Watt
- Mitsumi 104 Win95 keyboard
- Logitech Mouse w/ Pad
- Diamond Supra 56K w/ voice
- Creative Labs 24X EIDE CD-ROM
- Yamaha stereo sound
- 180 Watt Speakers+ Power Center
- Windows 95C full version w/ CD

only $1250

pentium®II 266MMX	1295
pentium®II 300MMX	1412
pentium®II 333MMX	1539
pentium®II 350MMX	1699
pentium®II 400MMX	1899

(350MHz & 400MHz use Intel Seattle 440BX Motherboard)

SUPER SALE

MB+CPU	
Intel Seattle SE440BX Pen II 400	$1045
Intel Seattle SE440BX Pen II 350	843
Intel Seattle SE440BX Pen II 333	728
Intel Seattle SE440BX Pen II 300	601
Intel Seattle SE440BX Pen II 266	484
Intel Seattle SE440BX Pen II 233	441
Intel Atlanta AL440 LX Pen II 333	673
Intel Atlanta AL440 LX Pen II 300	546
Intel Atlanta AL440 LX Pen II 266	429
Intel Atlanta AL440 LX Pen II 233	386
Asus P2B98-440 BX Pen II 400	1024
Asus P2B98-440 BX Pen II 350	815
Asus P2L97-440 LX Pen II 333	663
Asus P2L97-440 LX Pen II 300	536
Asus P2L97 -440 LX Pen II 266	419
Asus P2L97 -440 LX Pen II 233	376
Asus P2L97S -440 LX Pen II 333	744
Asus P2L97S -440 LX Pen II 300	615
Asus P2L97S -440 LX Pen II 266	494
Asus P2L97S -440 LX Pen II 233	451
Intel AN430TX P-233 MMX /512K	250
Intel AN430TX P-200 MMX /512K	230
Intel LongTree w/o Sound less $10	
Asus TX97E+ P233MMX/512K	259
Asus TX97E+ P200MMX/512K	237
AMD K6-233+Asus TX97E 512K	229
AMD K6-200+Asus TX97E 512K	220
Triton TX PCI + P-233 MMX/512K	225
Triton TX PCI + P-200 MMX/512K	199
Triton TX PCI + P-133 /512K	160
Triton TX PCI + P-100 /512K	149
Triton TX PCI + AMD K6-233/512K	175
Triton TX PCI + AMD K6-200/512K	165
Asus P55T2P4+ P-200 MMX/512K	220

MONITOR

MGC 14" .28 Monitor	135
MGC 15" .28 Digital	175
MGC 17" .28 Digital	310
Impression 7 plus 17" .27 Digital	339
Sony 100ES 15" .25	310
Sony 200GS 17" .25	620
ViewSonic 14" E641	175
ViewSonic 17" G771 .27	449
Hitachi 630 17" .22	645
NEC E700 .25 17" 1600x1200	575

Intel CPU w/ Intel Triton TX PCI 512 pipelined

Sale

Pentium® 200 MMX only $189

MB+CPU, socket 7 from 75 MHz to 233 MHz , EIDE PCI built-in I/O 16550 Ultra DMA/33. MMX™Technology READY

Diamond Fire 1000 Pro AGP 8MB SGRAM only	$149
Diamond Fire 1000 Pro PCI 4MB SGRAM only	$90
Diamond Stealth 64 3D 3000 4MB VRAM only	$90
Adaptec 2940 UW SCSI Controller only	$139
PENTIUM PRO 180 MHz CPU RETAIL BOX	$160

72 PINS MEMORY

8 MB 60ns 72 PIN EDO (16 chip)	15
16 MB 60ns 72 PIN EDO (8 chip)	25
16 MB 60ns w/ parity (12 chip)	35
32 MB 60ns (8x32)EDO	50
64 MB 60ns (16x32) EDO	120

30 PINS MEMORY

1 MB 60/70/80ns 30 PIN (1x3) Good	3
4 MB 60/70ns 30 PIN	15

SDRAM LONG DIMM

32 MB SDRAM 10ns (4x64)	55
64 MB SDRAM 10ns (8x64)	120
128 MB SDRAM 10ns (16x64)	205

KEYBOARDS

104 Win95 keys/Mitsumi 104	13
Keytronic Win95/PS2	25
Focus 2001/Focus7200+Trackball	28/35

MISCELLANEOUS

NetMouse PS2	12
Logitech Mouse 2 buttons/3 buttons	10/15
Logitech MouseMan serial/PS2-3but	25
Microsoft Mouse (w/system)	25
Microsoft IntelliMouse (w/system)	35
1.44 Teac Floppy Drive	23
CPU Cooling Fan 486/P5 75-233	5
CPU BallBearing Fan for Pentium II	15
120 Watt/180 watt Speakers	10/30
YAMAHA M7/M15 speakers	45/75
YAMAHA Subwoofer system 45	170
50 pin SCSI 3/4/7 connectors cable	5/7/10
68 pin SCSI 3/4 connectors cable	12/17
VCD Karaoke Music full screen	$10 each
VCD movie full screen XXX	$10 each

MULTIMEDIA

Yamaha stereo sound 16 PnP	15
Creative Labs SoundBlaster 16	35
Creative Labs SoundBlaster AWE64 Good	62
Creative Labs SoundBlaster PCI	45
NEC 4x4 EIDE CD-ROM	49
SONY 24x E-IDE CD-ROM	75
TOSHIBA 24x / 32x EIDE CD-ROM	70/80
CREATIVE LABS 24x E-IDE CD-ROM	70
TOSHIBA 32xSCSI CD-ROM	105
YAMAHA CD WRITER 2x4x6 internal SCSI	560
MITSUBISHI 2x2x6 REWRITER externalSCSI	445
Creative Labs Encore DXR-2 DVD (retail box)	270

CASES

Mini Tower Case w/LED 230 Watt P.S Good	25
Desktop AT case w/LED 230 Watt P.S	35
Medium /Full Tower w/ LED 250 Watt P.S	45/65
ATX Mid Tower w/ 250 Watt (2 Sides open)	60/80
ATX Medium Tower case w/ 250 Watt P.S.	65/80
ATX Full Tower 250 watt / 300 watt P.S	90/125

HARD DRIVERS

Fujitsu 2.60 /3.20 UltraDMA33	145/155
Fujitsu 4.30/ 5.20 /6.40 UltraDMA33	175/205/235
Quantum 2.10/3.20/4.30 UltraDMA33	140/175/185
Quantum 6.40/8.40 UltraDMA/33	265/352
Western Digital 2.10/2.50/3.20	140/150/170
Western Digital 4.30 / 5.10/6.40	185/210/240
Quantum 2.1/3.2/4.3/6.4 SCSI	199/240/280/345

COMPUTER repair & upgrades welcome

pentium® is A Registered trademark of Intel Corp.

VGA

S3 SVGA PCI 1 MB/2MB video	25/35
S3 Virge 3D 64 PCI 4MB Good	49
ATI All-in-Wonder Pro 4/8MB PCI	235/285
ATI All-in-Wonder Pro 4/8MB AGP	245/295
ATI Xpert@Work PCI 4/8MB	95/135
ATI Xpert@Work AGP 4/8MB	95/135
ATI Xpert@Play PCI 4/8MB	100/140
ATI Xpert@Play AGP 4/8MB	110/150
Memory for Millennium I 2/4mb	50/80
MT Millennium II PCI 4mb/retail	140/160
MT Millennium II PCI 8mb/retail	170/200
MT Millennium II AGP 4mb/8mb	140/210
Matrox Mystique PCI 2mb	50
Matrox Mystique PCI 4mb (retail)	110

DIAMOND

Stealth 64 3D 3000 4mb VRAM Good	90
Stealth II S220 PCI 4 MB Good	89
MPEG Card upgrade (M1100)	50
Fire GL 1000 Pro 4MB PCI Good	90
Fire GL 1000 Pro 8 MB AGP/PCI	149
Viper 330 PCI / AGP 4MB	120
Viper 330 TV OUT PCI 4MB	130
Diamond Monster 3D PCI 4MB	130
Diamond Monster II 3D PCI 8MB	225
Intel i740 chip 8MB X2 AGP	99
Creative Voodoo 2 12MB PCI	299

NETWORK CARD

3com 3C905 TX PCI/100BaseTX	70
NE2000 combo PNP-PCI	25

FAX-MODEM

33.6 Fax-Modem w/ Voice	45
56K Fax-Modem w/ Voice	60
DIAMOND SUPRA 56K voice PnP	65
US ROBOTICS 33.6K/ Voice	80/90
US ROBOTICS 56 K /Voice	95/120

Hapless slipped off to one side and took a seat.

He began to take in some details of his surroundings. Looking at the title slide projected on the nearest screen, he noticed a familiar border around the slide and realized with a start that the slide was in fact an HTML page and that a Netscape browser would be used to control the slide show.

"How odd," he thought, being genuinely fond of PowerPoint (Microsoft's tool for this sort of presentation). On further reflection, he began to understand this choice of presentation tools as a symbol of the enmity between Sun and Microsoft. Uncomfortable in the face of conflict, he shifted in his seat.

The music faded, the house lights dimmed, and someone on the podium started to talk about the Java Foundation Classes.

Hapless focused on the slides and listened attentively, certain that he was about to learn something clever that could be done with Java.

And fifteen minutes into the talk, he realized that the Java Foundation Classes really aren't about cleverness. Somewhat disconcerted, he tuned the speaker out and thumbed through the program to plan the rest of his time at the conference.

Session after session featured speakers from Sun or Sunsoft or JavaSoft, with precious few voices from other companies. And it seemed that the bulk of the sessions were about new or revised Java Application Programming Interfaces (APIs): The Java Foundation Classes, the Java 3D API, the Java 2D API, Enterprise JavaBeans, Java Naming and Directory Interface (JNDI), Java Message Service (JMS), Java Database Connectivity (JDBC), the Java Transaction Service (JTS), Remote Method Invocation (RMI), JavaHelp, the Java Printing API, and the Java Card API.

The barrage of trademarked acronyms was a clear signal that Java had come of age. No longer confined to niches like set-top boxes and Internet toys, it was now a tool programmers could use to build the (indeed, any) future.

Hapless had a brief but profound experience of alienation. Strictly speaking, he thought, languages don't have users, and Java is certainly a language. He fidgeted with the programmable ring he was wearing. Realizing that it had no user interface, he had a sudden, anxious view of himself as a user in a sea of developers.

And then the feeling passed, the speaker finished, and Hapless headed on to the next session ("Java Technology Experts Share Their Tricks!") where he would undoubtedly learn something clever. ◆

The barrage of trademarked acronyms was a clear signal that Java had come of age. No longer confined to niches like set-top boxes and Internet toys, it was now a tool programmers could use to build the (indeed, any) future.

Copyright © 1998 by Bennett Falk. All rights reserved.

QuickData - full press services
Graphic Design . Films Output . Color Printing
film 10" x 12" $10/pc
color printing 10% off
Quality Printing
- Datasheet
- Stationery
- Newsletter
- Brochures
- Catalogs
- Booklets
- Manuals
- Posters

Digital Color Services
- Scitex Dolev Imagesetting up to 19" x 25"
- Auto Trapping
- Photo Scanning
- 3m Rainbow Color Proofer
- NAPS Overlay Proofs
- Pressmatch Laminate Proofs
- English/Chinese Capability
- Mac/PC Format

Professional Desktop Publishing
- Graphic Design
- Typesetting (English & Chinese)
- English to Chinese Translating

Direction:
880 take exit on Montague Expwy east, turn left on S. Main St., pass BP gas station, turn left on the first driveway, to the end turn left again.

QuickData Processing
1677 S.MAIN ST. MILPITAS, CA 95035
408.956.8855 408.956.8933
E-Mail: terryh@quickdataprocessing.com

* Please take this ad when purchasing. For full color printing only.

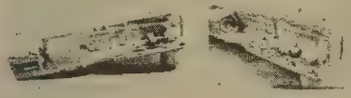
HSC Electronic Supply

Serving Silicon Valley since 1964!

...brings you a potpourri of high-tech goodies for the techno-tinkerer!
For thirty years we have been your source for Silicon Valley exotica!

Ruby Laser Rarity!

- That's right, be the first on your block to own a Laser Rangefinder module from an M-1 Tank!
- Optics module from Q-switched Ruby Laser includes cavity, ruby rod (3"), flash tube, spinning prism with high-speed DC motor, hall-effect switch, thermistor, etc.
- Factory refurbished units with spec. / test sheets
- Does not include power supply or control circuitry
- Caution...high power bursts -- not for amateurs!
- Overall measurements 8" long x 2.5" x 1.5" (excl. motor)



HSC#17263 **$65.00**

Sound Card Specials!

Diamond Multimedia Wavetable Sound Card

- Multi-interface for CD-ROM (Sony, Mitsumi, Pana., IDE)
- Full featured sound capability, 2MB Wavetable, 24 voice
- Line-in, Line-out, Mic , Speaker & MIDI-Game jacks
- New OEM pack, instruction sheet, 90-day HSC warranty

HSC#17142 **$24.95**

Media Vision PCMCIA Sound Card

- Great for Portables. Laptops with PCMCIA Slot
- External pod has joystick port, mic. input, line in & line out jacks, volume control
- Installation software, instructions included
- Windows 3.x, Windows 95 compatible
- New in OEM packaging (no box), 90-day HSC warranty
- We had these before at $39.95 and they went fast!

HSC#17036 **$29.95**

House that Equipment!

- Bargain on used, knee high 19" rack cabinets!
- 29.5" tall, with room for 21" of vertical instrument height
- 23.25" wide, and 30" front-to-back, textured black finish
- Made by AMCO Engineering
- Units are used, but in good shape
- Best if you pick up (cannot go UPS)
- Last time we had these at $149.00, and they went fast! Quantity discounts available.

HSC# 17069 **$99.00**

Absolute Last of the Red Hot Reno!

- Now at clearance price -- Media Vision *Reno*
  - Consists of new external Reno CD-ROM drive,docking bay with SCSI2 port, AC Adapter, cable kit, travel pouch, headphones
  - Late Model version Uses AC adaptor (included) or AA alkaline batteries (not included)
  - Double-speed 180mS drive is lightning fast!
  - Drive detaches from docking bay, use with headphones as a portable personal audio CD player
  - Great for Mac or IBM (adaptor bracket included)
  - SCSI Controller & software required for IBM use
  - Brand new, 90-day warranty

A.

Now - $59.00

Available Separately:
A. Macintosh Powerbook SCSI Adapter (HDI-30 to 25-pin D connector) **HSC#15704 $12.50** if purchased alone, or with purchase of Reno Kit.**$5.00**

PCMCIA Device Corner

We present here a collection of PCMCIA items that we have accumulated (note - very limited quantities!).

Trimble Mobile GPS Gold Card

- Turn your notebook into a GPS locator!
- Receiver is PCMCIA Type I card
- Includes roof or panel-mount antenna with 15' cable
- Trimble Mobile GPS software & instructions included
- Software gives coordinates, not maps
- New, OEM pack, 90-day warranty

$149.00

85MB PCMCIA Hard Disk Drive

- Integral Peripherals Model 1882PA 85 MB drive
- Add Plug and Play storage to your notebook any time!
- New, OEM package (no box), 90-day warranty

$69.00

170MB PCMCIA Hard Disk Drive

- Integral Peripherals Model 8170E "Viper 170E" drive
- Add even more storage to your notebook!
- New, OEM package (no box), 90-day HSC warranty

$125.00

Flash RAM Mass Storage Modules

- These are not technically PCMCIA devices, but they are small modules that will enhance your notebook computer!
- SunDisk Solid-state Mass Storage modules behave like a hard disk with no moving parts...nothing to wear out!
- Non-mechanical storage means high speed, ruggedness!
- IDE-interface (2mm 44-pin-style), instruction sheet
- New pulls from custom systems -- DOS formatted

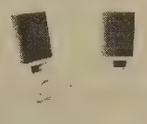
10.4MB Flashdrive $65.00
20.9MB Flashdrive $95.00
41.9MB Flashdrive $175.00

Super Sounding Speakers!

Tired of the cheesy sound coming from those give-away speakers in your multimedia kit? Try upgrading to these sonic wonders...you'll have to hear them to appreciate the difference these will make without blowing your budget!

GNT2500 2-way Bass-Reflex speakers

- 3.5" woofer, 1" piezo tweeter
- 15W built-in amplifiers, 80W peak, 5.4W RMS
- 40 - 20,000 Hz, built-in SRS 3-D stereo
- Measure approx. 3.75" x 6.125" x 9.25" tall
- AC adaptor, audio cables included
- On-off switch, 3-D switch, tone & volume controls
- Attractive off-white finish with grey gnile-cloth



HSC#16670 **$29.95**

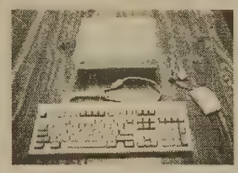
GNT3000 3-way Bass-Reflex speakers

- 4" woofer, 2" midrange, 1" piezo tweeter
- 23W built-in amplifiers, 120W peak, 20W RMS
- 20 - 20,000 Hz, similar to GNT3500, but no SRS 3-D
- Measure approx. 6.25" x 6.5" x 9.75" tall
- AC adaptor, audio cables included
- On-off switch, bass, treble & volume controls
- Attractive off-white finish with grey gnile-cloth

HSC#17085 **$39.95**

X-Windows Terminal!

- Tiny Axil/Hyundai X/11C smart terminal has big features!
- Connect to Ethernet (Coax or AUI), SLIP, or both!
- Built-in 10Base2 transceiver, 10Base5 AUI interface
- Uses a variety of protocols, TCP/IP, SLIP, TELNET, RARP, BOOTP, XDMCP, or PPP
- Comprehensive self-test and help menus for setup
- Requires 63.775KHz Horizontal, 67.9Hz Vertical (workstation-type) monitor, resolution is 1152 x 900
- RAM can be upgraded to 16MB (4MB SIMM included)
- New in box, includes 101-key keyboard, mouse, manual
- Measures 11.5" x 11" x 2", keyboard is 18" x 7"



HSC#17213 **$149.95**

Infrared Connections!

- IBM "Options" series ISA-Bus and PCMCIA card adaptors will add industry standard infrared communications capability to your desktop PC (with ISA slots) or notebook computer! (Win95 instructions available on our website)
- Allows wireless connection to compatible notebooks workstations, printers, and other peripherals supporting the Infrared Data Association (IrDA) standard
- Also will emulate a COM port for cable-less hook-ups
- Communicates up to 115KBps, or up to 1.152MBps with the included TranXit Software.
- Operates over distances up to 3 meters (10 ft.)
- Includes Card, transceiver module, driver disk & book
- Both styles new in box, 90-day warranty

HSC#16483 PCMCIA Version **$19.95**
HSC#16813 ISA-Bus Version **$19.95**
Or a package deal...get both for **$29.95**

Briefcase of Goodies!

- These handsome hardshell cases were used to carry a laptop-computer estimating system (laptop not included)
- They were used with a Compaq LTE laptop, and provided a SCSI port for a CD-ROM drive with battery back-up
- Large Nicad pack has 10 D-size Sanyo Cadnica cells
- Built-in 19VDC power supply for battery charging
- Tiny piggy-back PC board seems to be a SCSI interface
- Case measures 18" x 14" x 7", with several compartments
- SCSI II to CEN50 SCSI cable, many great parts inside!
- Buy either the whole assembly, or just the parts you want!
- Not guaranteed to function with laptops -- for parts only!

HSC#17180 Complete Laptop Case $49.95
HSC#17182 Empty Hardshell Case $29.95
HSC#17181 Nicad Pack, 12.5VDC, 5AH $17.50
HSC#17179 SCSI II Cable, 1 ft. long $12.50

Extra-long Cord Outlets!

- Don't daisy-chain those outlet strips to get power where you need it! (The fire department doesn't approve!)
- Multi-outlet SG Waber outlet strips have extra-long cords
- UL Approved, metal housings, 15 Amp circuit breaker
- Brand new, two lengths to choose from!
- Hurry, these won't last long, especially the 50-footers!

HSC#17172 4-Outlet strip w/ 15' cord $9.95
HSC#94148 3-Outlet strip w/ 50' cord $17.50

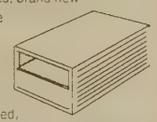
PC Videotape Editor!

- Use your computer to edit your home videos!
- Delete footage, rearrange up to 99 scenes automatically!
- No expensive computer cards to install!
- Requires 386 or higher computer, Sony-type Control-L (LANC) source camcorder and a recording VCR with infra-red remote control with TV or video monitor
- Unit consists of a cable to control the playback of your camcorder, and an infra-red transmitter to control VCR
- Plugs into parallel port of your computer -- no disassembly of your computer required!
- Includes software (Win 3.1 compatible) cables and manual
- New in box - 90 day warranty
- Requires 9V battery, not included

HSC#17154 **$29.95**

SCSI Drive Case Deal!

- Bargain case for 5.25" drives, brand new!
- 7" x 4.5" x 10.5" overall size
- 50-pin SCSI connectors
- SCSI ID switch
- 65W Power Supply
- Fan-cooled, uses standard IEC Power cord (not included)



HSC# 17130 5.25" SCSI Drive Case $39.95

Full CD-ROM / Sound Card Kit

- Diamond Multimedia 12X CD-ROM kit -- Full Bundle
- 12X Mitsumi Internal IDE CD-ROM drive
- 32-voice Wave Table sound card, 3D Audio
- Installation video, manuals, driver software included
- Includes Myst, CorelDraw 4.0, several CD Games
- New in colorful retail box, 90-day warranty

HSC#17198 **$99.00**

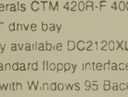
Parallel-Port Keyboard!

- Perfect for notebook computers, laptops, palm-tops, etc
- Full-size 101 keyboard by ALPS, model LPT 101
- Includes manual, installation diskette
- New in OEM box, 90-day warranty

HSC#17160 **$49.95**

Rugged Mike & Speaker!

- Extra-heavy duty hand-held microphone & enclosed speaker for extreme environmental use
- Made by GE for Ericsson EDACS "Orion" mobile radios
- Easily modifiable for your own use (ham, CB, etc.)
- Brand new in box, with custom Ericsson power cable



HSC#17172 **$29.95**

Backup Tape Drive Deal!

- Conner Peripherals CTM 420R-F 400MB tape drive
- Unit fits in 5.25" drive bay
- Uses commonly available DC2120XL tapes
- Connects to standard floppy interface
- Works directly with Windows 95 Backup utility
- Includes new Sony QW5122F QIC tape ($4.95 value!)
- New, OEM package, 90-day warranty

HSC#17161 **$29.95**

Visit HSC's Website!

- Pay us a virtual visit on the World Wide Web!
- Simply point your browser to *http: www.halted.com*
- Site is constantly being revised, please visit often!
- Check out the amazing "Gizmo of the Week" feature!

HSC Catalog online!

- That's right, get HSC's catalog on the World-Wide Web!
- Simply go to www.halted.com and follow the big red link
- Adobe .PDF files are available for download and viewing
- Or drop on by and pick one up ...we'd love to see you!

Halted specialties co. **HSC Electronic Supply**

Toll Free (Orders Only) 1-800-4 HALTED (1-800-442-5833)
Internet World Wide Web: http://www.halted.com
3500 Ryder St., Santa Clara, CA 95051 (408) 732-1573 -or-
4837 Amber Ln., Sacramento, CA 95841 (916) 338-2545 *FAX your orders to*
5681 Redwood Dr., Rohnert Park, CA 94928 (707) 585-7344 *(408) 732-6428*

Terms: Some quantities limited; all items subject to prior sale **Minimum order: $10.00 plus shipping.** Orders under $20.00 subject to $2.00 handling fee, in addition to shipping All orders shipped FOB Santa Clara, CA (this means you pay freight) by UPS Surface (no P.O. Boxes) unless otherwise specified, in which case prevailing carrier rate plus $5.00 handling fee applies. Prepaid orders that don't include shipping charges will be shipped freight COD There is a $4.75 UPS charge added to shipping charges for COD shipments If you have questions about your order, please call Customer Service at (408) 732-1854 M-F 9AM to 5PM PST

The Disk Subsystem

Taking The Subsystem Out For A Test Drive

By Fabian Pascal

It should be remembered that write and read rates may differ slightly.

Whoever once said, "Everything should be as simple as possible, but not simpler," was a very wise person. Peer into the manual of any disk drive and you'll quickly realize that to explain the disk subsytem to the average user requires considerable simplification. So take what follows accordingly.

The disk subsystem consists of the following components:

- controller
  - BIOS
  - driver
- drive(s)
  - firmware
  - cache
- cables
- I/O bus
- peripheral bus

Where the peripheral bus between the controller and processor subsystem is PCI and, the I/O bus between the controller and drive(s) is, for high performance systems, SCSI. As usual, the chipset and motherboard, which implement the buses, are components of all subsystems.

When applications involve reading, or writing data from/to the disk, the data instructions/commands and specifications are passed by the operating system (e.g., under NT, the I/O Manager and file system driver) to the disk device driver for a specific controller.

The pipe metaphor I used for the whole PC system as well as the processor and graphics subsystems applies to the disk subsystem.

A Matter Of Drive

The device driver (1) translates data specifications from logical to physical and passes them, through the PCI bus, to the controller, which (2a) passes them to the disk drive. For read operations, the drive (3) processes the commands and searches for the data and (4a) transfers it, via its caching buffer, through the SCSI bus, to the controller, which (5) passes it through the PCI bus back to the processor subsystem (usually, memory). For write operations, data follows the same path to the drive, except that it is (2b) passed by the controller to the drive's buffer, to be written to the disk later. Obviously, the slowest step will determine the performance of the overall process.

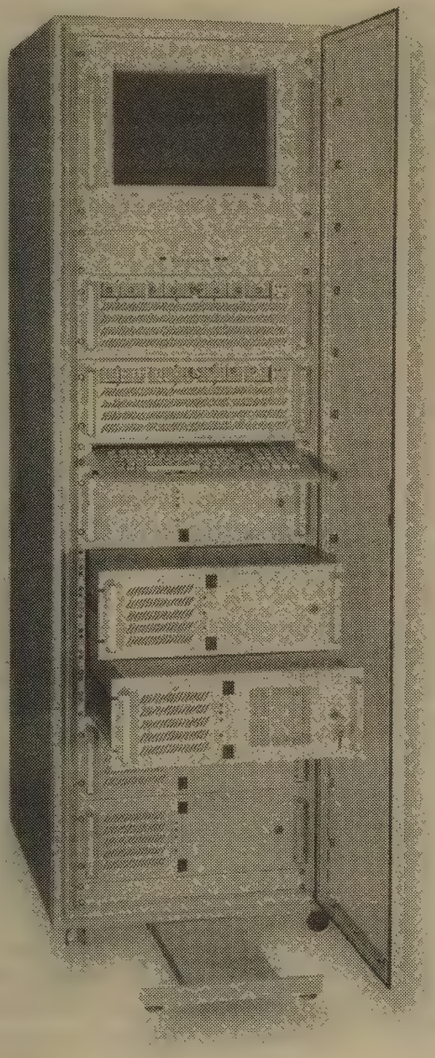
The PCI bus operates at 133MB/sec. In wide (16-bit), ultra mode—its latest specification pertinent to non-server systems—the SCSI bus operates at a burst rate of 40MB/sec. With ultra-wide SCSI controller and drives and assuming implementations, cabling, and configuration are reasonably up to spec (see recommended system specifications sidebar), the "narrowest pipe section" is the drive. That is due to both its mechanical overhead and its disk data rate.

Transferring data between the processor and disk subsystems involves, other than data transfers per se, electronic overhead—software (driver) and firmware (controller and drive) command processing; and mechanical drive overhead (disk positioning for reads/writes). The latter is measured in milliseconds (ms), relative to less than 100 microseconds for the former. When data is not contiguous on disk, searches must be performed for almost all commands and, thus, the performance of random disk access (e.g. database operations) is determined primarily by the drive's mechanical overhead. With contiguous data only a search for the first sector is necessary, which means that for sequential access with large block reads (>128KB) (e.g. graphics and video files), the drive's data rate (throughput) and command processing overheads become more important. Drives cache data in their buffer to minimize mechanical latencies, as well as to smooth transfers between it and the faster bus and controller.

Data Access Time

A disk drive's electromechanical overhead is measured as average data access time, measured in milliseconds. It is the summed times of three steps in the electrically controlled mechanical process of getting a drive's read/write heads to the disk locations where they need to read/write data:

INDUSTRIAL
COMPUTER • SYSTEMS



RACKMOUNT ENCLOSURE
- 8 to 20 slot enclosure
- Single or dual hot swap power supply
- Supports most PC/AT & ATX formats
- Shock-mounted drive bays
- Locking front panel access

RACKMOUNT RAID ENCLOSURE
- Builds up to 8 removable disk drive modules
- Single or dual hot swap power supply
- 2 cooling fans

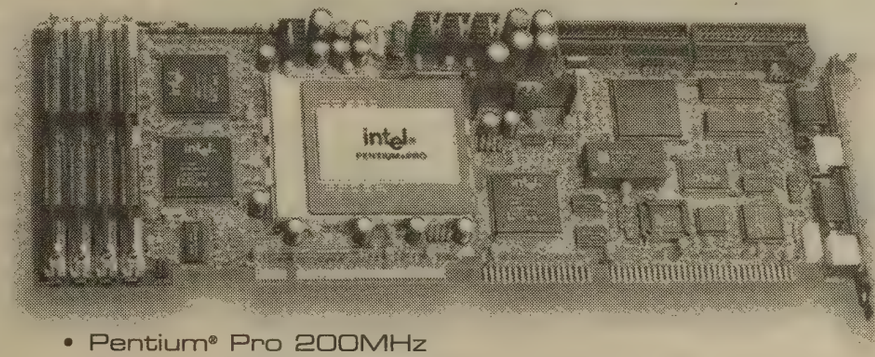
RACKMOUNT MONITOR ENCLOSURE
- 14"/15"/17" monitor enclosure
- Dust gasket between monitor screen and non-glaring front glass
- Easy access to controls

RACKMOUNT KEYBOARD
- Keyboard w/mouse holder
- Keyboard w/trackball

WALLMOUNT ENCLOSURE
- 6, 8 Slot wallmount enclosure

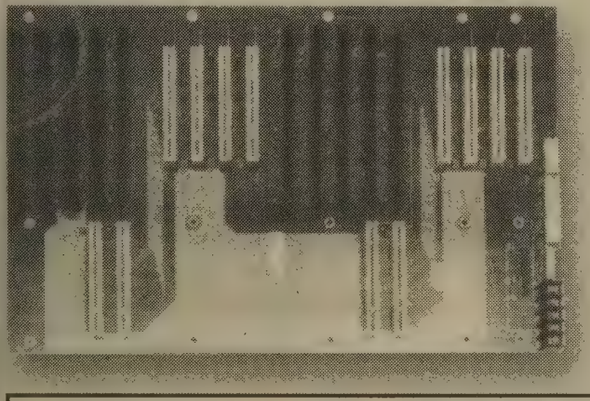
NEMA 4/12 WORKSTATION
- 14"/15" CRT or 10" TFT display touch-Ssreen panel (optional)

RACKMOUNT CABINET
- 40" to 77" w/wide range of accessories



- Pentium® Pro 200MHz
- 8MB to 256MB Fast Page Mode, EDO or BEDO
- AMI or AWARD PCI BIOS w/plug and Play
- Intel 82371SB (PIIX3), 82441FX, 8244FX Chipset
- Support Pentium® Pro processors up to 66MHz
- Dual Bus Master PCI Enhance IDE
- ATI 264VT 64-bit 2MB video on the board
- FCC Class A, CE Class A approved

From 486 to Dual Pentium® SBC



- 3-20 slots (ISA, ISA/PCI)
- Segmented backplane available
- PCI-PCI bridge chip support for 6 PCI PCIMG backplane

Catalog OnLine!
http://www.jktechnology.com
E-mail:PaulKK@ix.netcom.com
800-499-2518

J&K TECHNOLOGY

Tel (510) 226-9484
Fax (510) 226-9482

43224 Christy Street
Fremont, CA 94538

MON - FRI 8AM - 6PM

A Fresh New Place For Fresh New Macs

PowerMac 9600/300
AppleVision 750 17"
$3099
SAVE $150+

Free RealPC
Runs PC Software

G3/233
LG 17" Monitor
Bundle
$1820
LIMITED QTY!

Motorola Clone
604e/200 DT
$999
• Loaded 16/1.2G/12xCD/v2
• Identical to StarMax 4000

PowerMac

G3/300MT	64/6G/24x	$3010
G3/266MT	32/6G/24x/Zip/AV	$2210
G3/266DT	32/4G/24xCD/Zip	$1745
G3/233DT	32/4G/24xCD	$1470
9600/300	64/4G/24xCD	$2399
8600/250	32/4G/24xCD	$1699
(above w/ internal Zip)		+$105
7300/200	32/2G/12xCD	$1399

MacClone

604e/200T	64/4G/24xCD	$1299
604e/200D	16/1.2G/12xCD	$999

PowerBook

G3/250	32/5G/20xCD	$4299
Apple 33.6k PCMCIA		+$60

Memory

G3 SDRAM 32/64/128	$57/136/264
PM DIMM 32/64	$47/122

AppleVision		CPU Upgrade	
20" 850	$1389	604e/233	$349
17" 750	$699	604e/200MP	$449

All products are brand new. Original Apple warranty. Competitive pricing; **Check web for latest price.** Credit cards 2.5% extra. CA 8.25% tax. Attractive volume discount available. Email: sales@mactica.com Tel: 650-742-9782.

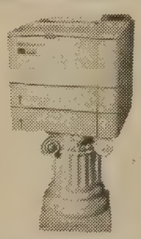
MACTiCA
1-888-666-5147
www.mactica.com

ONE STOP FOR ALL YOUR PRINTER NEEDS

Experience The Highest Quality Of Service And Value From One Of The Fastest Growing Printer Service Centers In The Bay Area

HP 4000 Series

HP LaserJet 4000 **$1049**
HP LaserJet 4000T **$1189**
HP LaserJet 4000N **$1349**
HP LaserJet 4000TN **$1499**



WE'LL BEAT ANY COMPETITOR'S PRICE!

HEWLETT PACKARD
Authorized Dealer Sales & Service Center

SALES
REPAIRS & PRODUCTS 100% GUARANTEED

BRAND NEW PRINTERS

5000 Series

LaserJet 5000	$1370
LaserJet 5000N	$1939
LaserJet 5000GN	$2442

8000 Series

LaserJet 8000	$2238
LaserJet 8000N	$2514
LaserJet 8000DN	$2989
HP Color LaserJet 5/5M	$CALL

See Our Repair Ad in the Classified Section!

"Financing Available"

Note: All registered trademarks and logos are the properties of their respective companies.
Prices are subject to change without notice. While supplies last.
All prices based on cash purchase. Credit Cards add 2%.

Computer Xtras Xpress Inc.
A.K.A. Signature Service Printer Division
www.cartridgesonline.com
San Jose • 1671 Rogers Ave.
1-888-774-5273 (voice) • 1-888-554-5273 (fax)

System Specifications

System Board

SY-6KB, $160 (direct)
SOYO Tek
(818)330-1712
www.soyo.com

Processor Subsystem

PentiumII/300MHz Processor, $720 (direct)
US Computers
(562)651-2345
uscomputers@csinets.com

64/128MB 10ns/66MHz SDRAM DIMMs
64MB, $249 (direct)
128MB, $489 (direct)
Unigen Corp.
(510)668-2088
www.unigen.com

Graphics Subsystem

FireGL 1000 Pro Graphics adapter (PCI), $249.95 (MSRP)
Diamond Multimedia
(408)325-7000
www.diamondmm.com

FlexScan FX-E8 21" monitor, $2079–$2435
Eizo-Nanao Technologies
(562)431-5011
www.eizo.com

SCSI Disk Subsystems

AHA2940UW UltraWide adapter, $125–$150
Adaptec Inc.
(408)945-8600
www.adaptec.com

UltraStar 9ZX UltraWide 9GB disk drive, $1,130
IBM Storage Systems Division
1-800-IBM-7777
www.ibm.com/storage

VikingII 9GB UltraWide disk drive, $895 (MSRP)
Quantum Corp.
(408)894-4000
www.quantum.com

SyJet 1.5GB Removable disk drive, $259–$300
SyQuest Technology
(510)226-4000
www.syquest.com

UltraPlex 32X/CAV CD-ROM UltraSCSI drive, $280–$331
Plextor Corp.
1-800-886-3935
www.plextor.com

SCSIVue Gold Cables
Internal Teflon Ribbon (per length and connectors)(direct)
External Diagnostic
68 to 50 HD 2ft.
SCSIVue Gold Diagnostic Active Terminator
50pin HD, $79 (direct)
Granite Digital
(510)471-6442
www.scsipro.com

SuperDisk LS-120 floppy drive (IDE), $117–$128
Imation Enterprises Corp.
1-888-466-3456
www.imation.com

Peripherals

Cordless Desktop (keyboard and mouse), $99 (MSRP)
Logitech Inc.
(510)713-4220
www.logitech.com

Assembly

ATX Lockable MidTower Case, $191 (direct)
ATX 300W Power Supply, $88.50 (direct)
Data Port VI Removable Module (hard drives), **$145** (direct)
Bay Cooler, $32.50 (direct)
California PC Products
(408)637-2250
www.calpc.com

Data Express Removable Enclosures
DE-75 (hard drives), **$207**
DE-150 SCSI (removable disks), **$186**
DX-100 Kit Option, $29
Hot Swap Option, $64
Kingston Technology
1-888-435-5461
www.kingston.com

System integration service (on per-case basis)
DSi
1629 Jackson St.
San Francisco, CA 94109
(415)922-4366
www.dsi2000.com

(Price ranges are mail order, unless otherwise specified)

DOMINO COMP

1-888-999-6569
Voice: 408-574-4977
Fax: 408 -363-1803
www.dominocomp.com
M-F 9am-6pm & Sat. 10am-6pm

Our warehouses in CA, IL, PA, TX and NY can delivery your orders at local cost which saves you money. If you order before 2pm PDT, you will be able to receive the ordered product by the next day.

We also provide access to our products through the web at www.dominocomp.com. Through this site, you can get quotes and access to our inventories instantly. If you feel there are higher prices on the Web, give us a call and we'll beat the price.

Search our Web-Site for a wealth of products and information. Find Products instantly... from "A" to "Z" and it's as easy as "http"

DOMINOCOMP QUALITY SYSTEMS

Systems Include:
32MB EDO
(P2)LX 512K.PCI Mother Board *(P5)TX
ATI 2MB 3D 64-Bit PCI SVGA Card
2.5GB Fujitsu UDMA
32X CD-ROM
16 bit Audio
56.6 Flex Modem
1.44 FDD, Speakers, Med Tower Case
ATX(P2), Mini Tower Case AT(P5), 104 key Keyboard & MS Mouse, MS Windows 95, ***One Month free Internet Access.***

Systems:
Intel P5166mmx.....$907
Intel P5200mmx.....$937
Intel P5233mmx.....$997
AMDK6200mmx.....$907
AMDK6233mmx.....$967
Cyrix M2-P200C.....$917
Intel P2 233 512k.....$1167
Intel P2 266 512k.....$1257
Intel P2 300 512k.....$1357
Intel P2 333 512k.....$1457

Systems Upgrades:
5.2GB.....add $64
11.5GB.....add $244
64mb RAM.....add $60
128mb RAM.....add $268
AWE 64.....add $50
USR 56k X2.....add $41
Refurb 28.8 Ext...add $19.99
17" .28 Mont.....add $299
15" .28 Mont.....add $189

A PERFECT OFFICE MACHINE

THIS MONTH

INTEL P5 233MMX W/FAN
ASUS512K PL W/UEIDE, 1P, 2S
WITH SUPER-TX CHIPSET UP TO 4MBSVGA
ONBOARD 32MBEDOS 60NS 72 (BRAND NAME)
3.2GB HDD 10MS
1.44 Fdd
17" .28 1280X1024
MINI TOWER
104KYB W95
MS COMP. MOUSE
16BIT SOUND W/3D
60W SPEAKERS W/3D
32X CD-ROM
10/100 PCI CARD
PRELOAD: WIN95B USB READY W/ DISK (OEM)
3YR STAND WRTY, 1YR ON-SITE 24 - 7

THIS MONTH

$989.00

For other service plans or more informationa about the service plan listed here, visit our web site at: WWW.DOMINOCOMP.COM

COMPAQ

PROLIANT SERVERS
PROLIANT 6500 6/200-512KB 128MB MODEL 1.
273350-005.....$15082.84
7000 6/200-1MB128MB MODEL 1S
273370-002.....$20825.47
6500 6/200-512KB 128MB MODEL 1
241700-001.....$15082.84
6500 6/200-1MB 128MB MODEL 1
241750-001.....$18573.46
6000 MODEL 6/200-1 128MB 512KB
273350-003.....$10077.75
6000 6/200 1024KB 128MB
273370-001.....$13568.36
5500 6/200-1 PPRO-200 512KB 128MB MODEL 1
285100-001.....$7938.34
5500R 6/200-1 PPRO-200 512KB 128MB MODEL 1 / 285120-001.....$8388.74

PROFESSIONAL WORKSTATION
CPW5100 P2-333 4GB-HD 1/P 64MB P2D
179800-002.....$3423.05
CPW5100 P2-333 4GB-HD 1/P 128MB 3D+
179800-005.....$6289.87
CPW5000 PPRO-200 4.3GB-HD 1/P 64MB 8X
269120-002.....$2083.56
CPW5000 PPRO-200 4.3GB-HD 2P 128MB 8X
269130-002.....$5301.23
PROMO WORKSTATION 6000 6/266 1P 64MB 4GB 2D W/ 1/2 OFF 19"MONITOR
269600-001.....$3886.68
PROMO WORKSTATION 6000 6/266 1P 128MB 4GB 3D+ W/ 1/2 OFF 21" MONIT
269600-002.....$7787.87
CPW6000 6266 2P 1P 64MG 4G 3D GLORIA-L 16X CDROM 269600-003.....$3710.19
PROMO WORKSTATION 6000 6/266 1P 32MB 2GB 2D W/ 1/2 OFF 19" MONIT.
269600-004.....$3434.28
CPW6000 6300 P2 1P 128MB 4GBHD 3D+CONTROLLER FIRE GL 4000 16XCDROM 269630-001.....$6555.60
WORKSTATION 6000 P2-333 4GB 1/P 64MB 2D
269640-001.....$3929.76
CPW6000 P2-333 4GB-HD 1/P 128MB 3D+
269640-002.....$6796.57
CPW8000 6200 2P 128MG 4GHD 2D 512K CACHE 16XCDROM 270200-002.....$9809.76
CPW8000 6200 2P 128MG 4G 3D+ 512K CACHE 16XCDROM FIRE GL4000
270200-003.....$12386.06
CPW5100 6300 P2 1P/64MB/4GB/2D MILLENIUM 2 24 X CD ROM (OOP Q2 98)
299300-003.....$3423.05
CPW5100 6300 P2 1P/64MB/2GB2X2D STB MVP 24X CD ROM 299300-004.....$3495.12
CPW5100 6300 P2 1P/128MB 4GB 3D
299300-006.....$6048.90
CPW5100 6300 P2 1P/64MB/4GB/3DX ELSA GLORIA-XL 24X CD ROM
299300-007.....$5247.19

NoteBook Systems
Armada 1530DM.....$1,499
P-133 MMX 1.4GB 16MB EDO 12.1 DSCAN 10X 33.6
Armada 1540DM.....$1799
P-150 MMX 2.1GB 20X 33.6 12.1DSCAN
Armada 1598DM.....$3785
P-266 MMX 32MB 4.0GB 20X K56 W95
Armada 7330T.....$1518
P-150 MMX 2.1GB 16MB 12.1 TFT LI-ION
Armada 7350MT.....$2899
P-166 MMX 2.1GB 32MB 12.1 TFT 33.6 LI-ION
Armada 7370DMT..... $4383
P 233 MMX 32MB 12.1 TFT 20X 33.6 LIION
Armada 7380DMT.....$4683
WIN95 PENT-266 MMX 32MB 12.1TFT XGA 20X 33.6

HEWLETT PACKARD

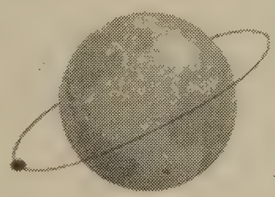
Printers
HP Laser Jet 5.....$999
HP Laser Jet 5Si.....$2349
HP Laserjet 6LXi.....$377
HP Laser let 6PXi.....$745
HP Laser Jet 4000 (C4118A).....$1099
HP Laser Jet 4000N (C4120A).....$1415
HP Laser jet 4000T (C4119A) 3 trays.....$1249
HP Laser Jet 400OTN (C4121A) jetdirect.....$1575

IBM®

Workstations
PC 300GL..... $942.16
P166MMX 2.5GB 32MB PCI USB WIN95 (628273U)
PC 300GL..... $942.16
P200 MMX 2.5GB-HD 16MB WIN95 (628283U)
PC 300GL..... $1072.70
P233 MMX 2.5GB-HD 32MB WIN95 (628286U)
PC 300XL..... $2685.52
P2-300 4.2GB-HD 32MB 16X NT4.0 (658853U)

INTERNET SERVICES

Explore New Worlds With DominoComp's 1st Connect Internet Services



X2 56K PPP Internet Specials

- **PPP Dial Up Account With E-Mail, Unlimited Access and no setup fee-.....$18.88 a Month**
- **Small Businesses Packagaes: 1 PPP, 30mb, 10 e-mail only $35 setup fee-.....$24.99 a month**
- **56k - T1 Frame Relay, T1 - T3 Dedicated Line Leasing.....Call**
- **Domain & web-site Hosting, e-mail and news.....Call**
- **Web Design & Web Develpment Packages! Complete packages starting at.....$125.**

Electronic Commerce Site Development

- **Credit Card Authentication & Secure Server (https)**
- **ASP, Java & Java Script, CGI & Front Page Extentions**
- **Support Unix and Windows NT**
- **Server Collocation**
- **24hr Monitoring**
- **Full System Backup**

Covering
(408), (510), (415), (650) ...and more, Call for more info.

! Unlimited 56k Usage !
! Busy Signal Free !
! Three account Special !
Sign up two freinds and recieve a discount
Call for more information

For more information, please visit our Web Site at www.1connect.com Or Call DominoComp at 408-547-4977

3Com® Bay Networks Cisco Systems ASCEND

COMPAQ HEWLETT PACKARD IBM® TOSHIBA Microsoft®

All prices and availability are subject to change with out notice. DominoComp is not responcible for Typographical Errors. All logos are registered trademarks of their Companies

avg. data access time = seek time + head switch time + rotational latency

Seek time is the time it takes the actuator arm to move a head between disk tracks. 3.5" drives have about 3,000 tracks per platter; it can take anything from 2ms to move between adjacent tracks, to 20ms between the outest and innest track. Average seek time is the time it takes to move for a randomly located request.

Only one head can read/write at a time, so head switch time is the average time it takes the drive to switch between two heads when reading/writing.

When a head is positioned over the right track, it must wait for the drive to spin its platter to the correct sector. On average, the wait time is half of a full spin, which is called rotational latency. Obviously, as Table 1 shows, the faster a drive rotates, the shorter the latency. But because faster rotation produces more heat and drive wear, manufacturers also employ various other techniques to minimize latency.

For the best performance for a wide range of workloads with varying mixes of sequential/random access, reads/writes and block sizes—which is what applications generate—you should get the ultra-wide SCSI drives with the fastest rotation speed, lowest mechanical overhead, highest throughput, and largest, smartest buffer you can afford.

Drive Data Rate (Throughput)

When it gets to the proper location, the head reads/writes from/to the disk, an electronic process of transferring data from disk to the controller, or vice-versa. Since, as explained above, the controller and buses (not to mention the processor subsystem to which the controller must pass the data) operate at much faster rates than drives, the data is passed through the drive's buffer/cache which, depending on the buffer's organization and size, can improve performance by 50–100%.

A drive's data rate (or sustained throughput), measured in MB/sec, is the rate at which the drive can read/write data from disk/buffer to buffer/disk. This rate is determined by various factors, such as spindle speed, recording method and density, data organization, and access method, etc.

Note that drives have more sectors on the outer than on the inner tracks, which means that more data is transferred during outer than during inner accesses. Thus, data rates decrease across the disk from the out in, which is why operating systems partition and write to disk starting from the outermost section. Look, therefore, for minimum and maximum media rate specifications to get a complete sense of a drive's performance. Some vendors, e.g. Quantum, provides only an average rate. It should be remembered that write and read rates may differ slightly.

This discussion generally applies to removable and CD-ROM drives and There are, however, operational differences between them and hard drives, e.g head switch time does not apply.

Published Specifications

Since the processor subsystem is the fastest relative to all other subsystems (even the 66MHz memory bus operates at 532/sec), your system will be as fast for disk intensive applications as the drive(s) you select. From the above discussion, it follows that for the best performance for a wide range of workloads with varying mixes of sequential/random access, reads/writes and block sizes—which is what applications generate—you should get the ultra-wide SCSI drives with the fastest rotation speed, lowest mechanical

Anything they can do we can do better...

- The ultimate custom computer configuration (any make, any item).
- Hard-to-find items & special orders? CALL!
- Individually assigned reps (no holding, no hassles)!
- All your computer needs — one-stop shop!
- Aggressive pricing always.
- On-/offsite repair service from $55/hour.
- Free installation of computer components with purchase.
- Free delivery & installation of systems within 30 miles.
- Serving corporate accounts & individuals for 15 years.

Authorized for IBM COMPAQ HEWLETT PACKARD and All Other Major Manufacturers

EDC SYSTEMS
Since 1983

510-283-1700
fax 510-283-1744
3455 Golden Gate Way
Lafayette, CA 94549

Our Readers Respond...

70% of our readers visit a Web site due to an advertisement in *MicroTimes*.

Let us help put to work for you the power of informed and responsive customers.

MICROTIMES
www.microtimes.com
(510) 768-1200

EXPANDED SHOWROOM

WEIRDSTUFF®

www.weirdstuff.com

We Buy and Sell Excess Inventories

Close Outs

Visit the one of a kind WEIRDSTUFF® sealed bid sale at our Sunnyvale location.

Sealed Bid Sale is every Monday, Tuesday & Saturday 9:30-6:00 Min. Bid $26

HARDWARE

SUNNYVALE ONLY

U-Kleen-Um Tested Monitors	$69.95
SUN Sparc Stations	$150 AND UP
486-PC Systems	$75 AND UP
PC Keyboards	$5.00
PC Speakers	$9.99
VGA + SVGA Cards	$9.95 AND UP
Floppy Drives 1.44	$12.95
Floppy Drives 1.2	$10.00
Soundcard w/wavetable	$14.95
Serial Mice (used)	$5.00
MS Serial Mouse (used)	$7.50
486MB(256k-ch/16mbRAM)	$45.95
486MB(256k-ch/24mbRAM)	$55.95
1x9-70 Memory	$3.00
4x9-70 Memory	$15.99
486 DX-50 CPU CHIP	$20.00
Visual dBase 7 Pro	$44.95
Mac Performa's	CALL
Mac Quadra's	CALL
Mac Keyboards	$24.95
Mac Mice	$15.00
Mac Duo Dock	$100.00
386 System w/4MB RAM, 40MB HD, VGA	$39.95
Sony Dual 1x CD-ROM (ext. w/con.)	$12.95
IBM Pro Printer	$25.00
ASCI and ANSI Terminals	$25.00 AND UP
Sun Internal CD-ROMs	$35.00

SOFTWARE

SUNNYVALE/FREMONT

MS Mouse	$14.99
Netscape Communicator 4.03	$9.99
MS Windows 3.1	$39.99
Red Hat/Power Tools	$26.99
Lotus SmartSuite 97	$29.99
HTML Clipart CD	$9.99
60-80-200W Speakers II	$30.00
IBM PC-DOS 7	$29.99
Macromedia Director 5 Studio	$149.99
Phantasmogoria 1 or 2	$19.99
Conflict Catcher 3	$5.99
Xoftware for Win	$9.99
Borland Turbo C++	$29.99
King's Quest VII	$12.99
Win Probe 3	$9.99
Magic Cap Win 95	$9.99
Print Master Gold Deluxe	$19.99
Compton's Encyclopedia	$14.99
Norton's Utilities 3.0	$49.99
Jumpstarts	$9.99
EZ Language French, German, Russian, Japanese, Italian & French	$7.99 Each
DOS, PowerPoint, Borland Quicken & many more	

Prices and availability subject to change without notice.

New & Used Inventory Changes Daily!

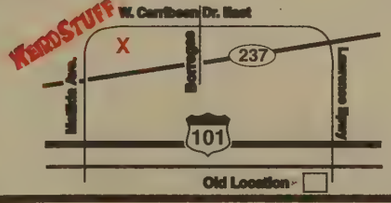
- Monitors
- Terminals
- Hard Drives
- Floppy Drives
- Video cards
- I/O Cards
- CD ROMS
- Software
- Laptops
- Keyboards
- Printers
- Power Supplies
- Computer Cases
- Computer Cables
- Copiers
- WEIRDSTUFF®
- P.C. Systems
- Apple Systems
- Sun Sparc Stations
- Network Equipment
- Telephone Equipment
- Industrial Equipment
- Office Furniture
- Equipment Racks

SUNNYVALE STORE

The Original WEIRDSTUFF® Warehouse
384 W. Caribbean Dr., Sunnyvale, CA

(408) 743-5650
FAX: (408) 743-5655
www.weirdstuff.com

Sunnyvale Store Hours:
Mon-Sat 9:30-6:00

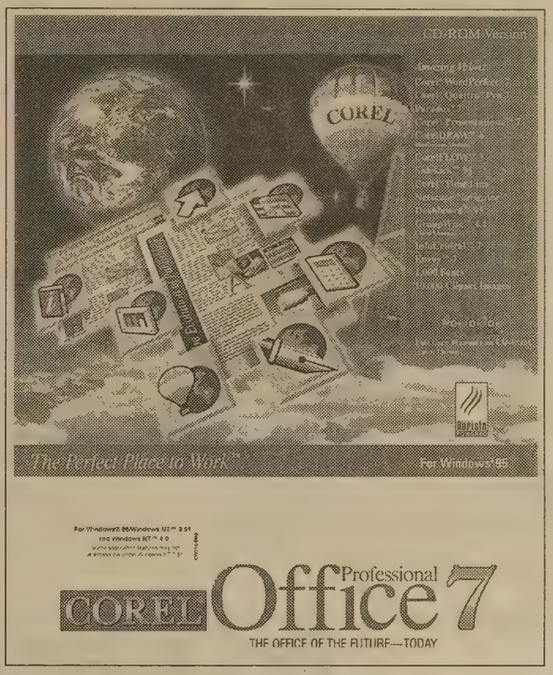


Special Purchase. While They Last!

Unbelievable Price:

$49.99

Package Contains 3-CD's! Complete with all of these amazing features



- Corel WordPerfect 7
- Corel Quattro Pro 7
- Paradox 7
- Corel Presentations 7
- CorelDraw 6
  - Illustration Module
- CorelFlow 3
- Sidekick 95
- Corel Time Line
- Corel A-Z
- Netscape Navigator
- Group Wise
- Envoy 7
- Dashboard 95
- Quick View Plus
- Corel Barista
- Info Central 7
- IBM Voice Type Control:Voice Recognition Utility!
- 1,000 Fonts
- 10,000 Clipart Images

Discounts for Quantities

Tens of 1000's of Titles
CD-ROM & Hard-to-Find Diskettes

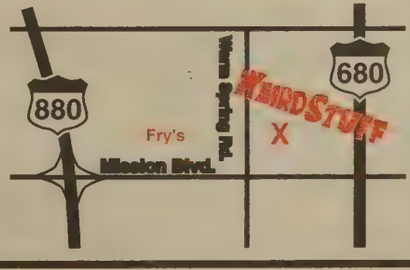
$2 Discount Table 100's of Titles

FREMONT STORE

Software Store
46577 Mission Blvd.
Fremont, CA

(510) 354-6500
FAX: (510) 354-6551
www.weirdstuff.com

Sun.-Mon.	10:00 am – 7:00 pm
Tue. - Thu.	10:00 am – 8:00 pm
Fri.-Sat.	10:00 am – 9:00 pm



overhead, highest throughput, and largest, smartest buffer you can afford.

Table 1 shows the published specifications of the drives in the recommended system specifications.

DRIVE SPECIFICATIONS

	9ZX	Viking II	SyJet	UltraPleX	LS-120[4]
Rotational speed (rpm)	10,000	7,200	5,400	6,890	720
Buffer (KB)	630	512	512	512	8
Sust. Thruput (out-in) (MB/s)	17.0-10.5	8.0-14.0[2]	6.9-3.7	4.8-2.0	.375-.681
Average seek time r/w (ms)	6.3/7.7	<8.0-8.5/ <9.0-9.5	6.4	~80	70
Head switch time (ms)	.83	1.0-1.5	[3]	[3]	[3]
Rotational latency (ms)	3.0	4.2	5.6	~5	41.7
Avg. Access Time[1] r/w (ms)	10.1/11.5	13.2-14.2/14.2-15.2	12.0[2]	85	111.7

[1] = avg. seek time + head switch time + rot. latency [2] average
[3] not applicable [4] IDE device

Notes: Care needs to be exercised with published specifications, as vendors may use different terms for the same numbers, or the same term for different numbers.

Comments

While EIDE drives are less expensive than SCSI drives and work with a controller built into the motherboard (the SCSI controller is purchased separately), tests have shown that they are slower than SCSI drives. This is true even of UltraDMA drives supporting a bus rate of 33MB/sec, close to the ultraSCSI rate of 40MB/sec. That is, on the one hand, due to their maximum rotational speed of 5,400rpm (rotational latency 5.7ms), smaller caches and lower media rates; on the other hand, the SCSI standard has performance enhancing features such as "connect-disconnect" and "tagged queueing," not available for EIDE. Of course, if you use more than four devices (e.g. 3 hard drives, a CD-ROM drive, a removable drive and more, only SCSI supports 7, or even 15).

Ultra-wide SCSI is sufficient for most standalone systems. Given the media rates in Table 1, only if your applications simultaneously and heavily access more than two or three drives, will the 40MB/sec bus be saturated, in which case you need to use a Ultra2 controller and drives, which are more expensive, but operate at double that rate, 80MB/sec, over the SCSI bus.

The Ultrastar 9ZX drive is somewhat thicker (1.6") and runs hotter than 7,200rpm drives such as the Viking II (1"). It has IBM's built-in Drive-Temperature Indicator Processor (Drive-TIP) feature, which automatically monitors disk drive temperature and is supposed to alert the user when the recommended temperature is exceeded. It is implemented within the industry's SMART specifications, which include other features, such as Predictive Failure Analysis (PFA). SMART requires, however, operating system support, which is not available in NT 4.0. Some such support may become available in NT 5.0, but the

continued on page 182

MEMORY WORLD

1580 OAKLAND RD. C115 SAN JOSE CA 95131

CALL FOR STOCK AVAILABILITY

PH#408-441-1477 FAX# 408-441-1463

1-800-889-5762

CREDIT CARD ORDERS ACCEPTED

RE-SELLERS CALL FOR QUANTITY PRICING

CPU

INTEL
PEN-II-233/266/300 . . . $198/239/358
PII 333 . . . 488
PII 400 . . . 795
P200/200MMX/233MMX . . . 121/107/131
P5-166/166 MMX . . . 88/99
P5-133/100 . . . 85/63
P6-Pro 180 256K . . . 117
P6-200 256K . . . 295

AMD
AMD K6-233 . . . $91.50
AMD K6-200 . . . 83

CYRIX/IBM
CX686MX233 2.5/66MHz . . . 80
CX686MX266 2.5/66MHz . . . 155

IB686MX233 2.5/75MHz . . . 76
IB686MX200 2.0/66MHz . . . 67
IB686MX266 2.0/66MHz . . . 153

MEMORY

168-PIN DIMM
16/32MB SDRAM-10 . . . 30/50
64/128MB SDRAM-10 . . . 99/190

16/32MB EDO UNBUFF . . . 30/51
64/128MB EDO UNBUFF . . . 86/156

168-PIN DIMM w/ECC
32MB EDO-ECC-BUFF . . . 66
64MB EDO-ECC-BUFF . . . 131
128MB EDO-ECC-BUFF . . . 248
32MB EDO-ECC-UNBUFF . . . 66
64MB EDO-ECC-UNBUFF . . . 131
128MB EDO-ECC-UNBUFF . . . 258
32MB SDRAM-ECC . . . 72
64MB SDRAM-ECC . . . 182

72-PIN SIMM EDO/FPM
4MB 1X32-60 2-CHIP . . . 10/11
4MB 132-60 8-CHIP . . . 11.50

72-PIN SIMM EDO/FPM CONT.
4MB 1X32-70 8-CHIP . . . 10.50
8MB 2X32-60 4-CHIP . . . 15
8MB 2X32-60 16-CHIP . . . 16.75
16MB 4X32-70 8-CHIP . . . 26/30

16MB 4X32-60 8-CHIP . . . 24/25
32MB 8X32-60 . . . 41/44
64MB 16X32-60 . . . 82/116

72-PIN SIMM w/PARITY
4MB 1X36-60 . . . 15
8MB 2X36-60 . . . 25
16MB 4X36-60 . . . 30
32MB 8X36-60 . . . 53
64MB 16X36-60 . . . 119

30-PIN SIMM
1MB 1X3-60 . . . 9
4MB 4X3-60 . . . 12

VGA CARDS

DIAMOND
PRO 2000 w/2MB Upgradable . . . 60
PRO 2000 w/4MB Fixed . . . 71.50
Stealth 3D 3000 S3 VIRGE 2MB VRAM Upgradable . . . CALL
Stealth 3D 3000 S3 VIRGE 4MB VRAM . . . 142
Monster 3D 4MB DRAM OEM/Retail . . . 154/177
Stealth II S2200 w/4MB SGRAM . . . 98
Fire GL Pro 1000 SGRAM PCI OEM 4MB/8MB . . . 143/177
Viper V330 4MB OEM PCI/AGP . . . 152/157
Stealth 2500 w/1MB DRAM Alliance Chip Set . . . CALL
2MB VRAM Upgrade Kit for Stealth 64 Video/3D 300054/CALL

MATROX
Millennium II 4MB Upgradable PCI/AGP OEM . . . 155/168
Millennium II 4MB Upgradable PCI Retail . . . 172
Millennium II 8MB Upgradable PCI/AGPOEM . . . 220/233
Millennium II 8MB Upgradable PCI Retail . . . 243
Mystique 220 3D 2MB Upgradeable OEM/Retail . . . 95/126
Mystique 220 3D 4MB Upgradeable OEM/Retail . . . 104/118
M3D 4MB SDRAM Retail . . . 97
Upgrade Module Mystique 220 2MB/4MB/6MB . . . 47/77/86
Upgrade Module Mill-II 4MB/8MB/12MB . . . 104/182/263
Rainbow Runner for Mystique 220 . . . 173

ATI TECHNOLOGY
3D Xpression 2MB EDO Fixed . . . 53.50
3D Xpression SGRAM 2MB Upg/4MB Fixed . . . 63/77
3D Xpression SGRAM PC2TV 2MB Upg/4MB Fixed . . . 74/88
3D Proturbo SGRAM PC2TV Upgradable OEM 4MB/8MB . . . 120/159
Xpert @ Work OEM 4MB PCI/AGP . . . 131/140
Xpert @ Work OEM 8MB PCI/AGP . . . 176/185
Xpert @ Play OEM 4MB PCI/AGP . . . 143/155
Xpert @ Play OEM 8MB PCI/AGP . . . 189/206

CALL OR VISIT OUR WEBSITE AND E-MAIL ORDERS TO memory@chipmerchant.com DESKTOPS, LAPTOPS, PRINTER AND WORKSTATION MEMORY.
LOWEST PRICES FOR ACER, APPLE, AST, COMPAQ, DEC, DELL, EPSON, HEWLETT PACKARD, IBM, NEC, PACKARD BELL, PANASONIC, SILICON GRAPHICS, SUN, & TOSHIBA.
GOV'T/UNIV. ORDERS WELCOME. PRICES SUBJECT TO CHANGE. 15% RESTOCKING FEE. CALL FOR WARRANTY.

BG COMPUTER

SPECIALIZING IN NETWORKING REPAIRS FOR ALL SIZE BUSINESSES

CORPORATE PO'S WELCOME!

Super Safe

- Intel 430 TX chipset M/B with 512K cache
- AMD K6-200MHz MMX CPU w/cooling fan
- 32MB 10ns SDRAM
- Fujitsu 3.2GB hard disk drive
- Mitsumi 1.44MB floppy disk drive
- Acer 24X IDE CD-ROM drive
- S3 PCI SVGA card w/2MB RAM
- Acer 3D 16-bit sound card
- Mini tower case w/ 230W power supply
- Genius Internet P/S2 mouse
- Win 95 105-key keyboard
- Parts only

$499

AMD K6® 233MHz MMX $529
Pentium® 166MHz MMX $529
Pentium® 200MHz MMX $539
Pentium® 233MHz MMX $569

233MHz Monthly Special

- Intel 430TX Chipset MB w/512K Cache
- AMD K6-233MHz MMX CPU w/cooling fan
- 32MB SDRAM
- Fujitsu 3.2GB Ultra DMA IDE hard disk drive
- Mitsumi 1.44 MB floppy disk drive
- Acer 24X IDE CD-ROM drive
- Diamond 3D 2000 ProPCI w/4MB RAM
- Acer 3D FX 16-bit sound card
- Rockwell 56K Flex fax modem w/voice
- Mid-tower case w/ 230W power supply
- Genius 2-button netmouse
- Win 95 105 Keyboard
- P60W Multimedia Speakers
- Win 95 CD & Manual
- 1-year warranty on parts and labor

$699

Pentium® 166MHz MMX $699
Pentium® 200MHz MMX $729
Pentium® 233MHz MMX $759

Pentium II Super Special

- Intel 440LX chipset MB w/USB ports
- Pentium II 233MHz w/cooling fan
- 32MB SDRAM
- Fujitsu 3.2GB Ultra DMA IDE hard disk drive
- Mitsumi 1.44MB floppy disk drive
- Acer 24X IDE CD-ROM drive
- Diamond 3D 4000 AGP w/4MB RAM
- Acer 3D FX 16-bit sound card
- Rockwell 56K Flex fax modem w/ voice
- ATX mid tower case w/ 235W power supply
- 2-button PS/2 mouse
- Win 95 105 keyboard
- P60W multimedia speakers
- Windows 95 CD & Manual
- 1-year warranty on parts and labor

$889

Pentium® II 266MHz MMX. . . . $949
Pentium® II 300MHz MMX. . . $1069
Pentium® II 333MHz MMX. . . $1199

Notebook 6100 Special

- 12.1" Active TFT Display
- Motherboard with 512K cache
- Pentium® 233MHz MMX w/cooling fan
- 32MB EDO RAM (exp. 128MB)
- Removable 3.5GB Toshiba hard disk drive
- Removable 1.44MB floppy disk drive
- Built-in 20X IDE CD-ROM drive
- Built-in SVGA card with 2MB RAM
- Built-in 3D 16-bit audio on board
- Built-in microphone & speakers
- 33.6K PCMCIA fax modem
- 1-Type III & 2-Type II PCMCIA slots
- NiMH Battery & 2nd barrery bracket
- Track pad mouse
- Window 95 CD and manual
- Carrying case

$1599

Options:
Memory: 16MB/32MB/64MB . $49/$79/$139
HDD: 2.1GB/3.1G . . . . . $179/$229
Fax: 33.6/56K/NIC. . . . . $79/$99/$99

Pentium® II Power User

- Genuine Intel AL440LX Motherboard w/AGP with onboard audio
- Pentium II 233MHz MMX w/cooling fan
- 64MB SDRAM
- Fujitsu 4.3GB Ultra DMA IDE hard disk drive
- Mitsumi 1.44MB floppy disk drive
- Toshinba 24X IDE CD-ROM drive
- ATI 3D Xpression+ w/4MB SGRAM
- Yamaha onboard sound card
- Rockwell 56K Flex fax modem w/voice
- ATX mid tower case w/235W power supply
- 2-button P/S2 mouse
- Win95 105-key keyboard
- P60W multimedia speakers
- Windows 95 CD & Manual
- 1-year warranty on parts and labor

$999

Pentium® II 266MHz MMX . . . $1069
Pentium® II 300MHz MMX . . . $1699
Pentium® II 333MHz MMX . . . $1289
Pentium® II 350MHz MMX. . . $CALL
Pentium® II 400MHz MMX. . . $CALL

Pentium® II Office Station

- Genuine Intel AL440LX Motherboard w/AGP & onboard audio
- Pentium II 233MHz MMX w/cooling fan
- 64MB SDRAM
- Fujitsu 4.3GB Ultra DMA IDE hard disk drive
- Mitsumi 1.44MB floppy disk drive
- Toshiba 24X IDE CD-ROM drive
- ATI Xpert@work AGP w/4MB SGRAM
- Yamaha onboard sound card
- Rockwell 56K Flex fax modem w/voice
- ATX mid tower case w/235W power supply
- 2-button P/S2 mouse
- Win95 105-key keyboard
- P60W multimedia speakers
- Windows 95 CD & Manual
- 1-year warranty on parts and labor
- Office 97

$1159

Pentium® II 266MHz MMX $1229
Pentium® II 300MHz MMX $1339
Pentium® II 333MHz MMX $1459
Pentium® II 350MHz MMX $CALL

NT WorkStation/Server

- Genuine Intel AL440LX Motherboard w/AGP & onboard audio
- Pentium II 233MHz MMX w/cooling fan
- 64MB 10ns SDRAM
- Fujitsu 6.4GB Ultra DMA IDE hard disk drive
- Mitsumi 1.44MB floppy disk drive
- Toshiba 24X IDE CD-ROM drive
- Diamond 3D 4000 AGP w/4MB RAM
- Real Magic MPEG2 decoder card
- ATI Xpert@play w/ 4MB SGRAM
- Yamaha onboard sound card
- ATX mid tower case w/235W power supply
- 2-button P/S2 mouse
- Win95 105-key keyboard
- P60W multimedia speakers
- 1-year warranty on parts and 5-year labor

NT WorkStation 4.0
$1169
NT Server 4.0 (5 users)
$1289

Pentium® II 266MHz . . . . . add $60
Pentium® II 300MHz . . . . add $180
Pentium® II 333MHz . . . . add $300
Pentium® II 350MHz MMX. . . $CALL
Pentium® II 400MHz MMX. . . $CALL

Notebook 6400 Special

- 12.1" Active TFT Display
- Motherboard with 512K cache
- Pentium 233MHz MMX W/COOLOING FAN
- 32MB EDO RAM (exp. 128MB)
- Removable 3.5GB Toshiba hard disk drive
- Revovable 1.44MB floppy disk drive
- Built-in 20X IDE CD-ROM drive
- Built-in SVGA card with 2MB RAM
- Built-in 3D 32-bit audio on board
- Built-in microphone & speakers
- 33.6K PCMCIA fax modem
- 1-Type III & 2-Type II PCMCIA slots
- NiMH Battery & 2nd barrely bracket
- Track pad mouse
- Window 95 CD and manual
- Carrying case

$1699

Options:
Memory: 16MB/32MB/64MB . $49/$79/$139
HDD: 2.1GB/3.1G . . . . . $179/$229
Fax: 33.6/56K/NIC. . . . . $79/$99/$99

MOTHERBOARDS

INTEL®

Seattle SE440BX Pentium II MB w/PCI audio (100MHz bus) $209
Atlanta AL 440LX Pentium II MB w/ audio. $179
Atlanta AL 440LX Pentium II MB w/out audio $165
Dakota DK 440LX Dual Pentium II MB w/audio & SCSI $475

ASUS

TX97-X 430TX w/ 512K $135
P2L97 440LX chipset Pentium II MB (ATX) $149
P2L97-S 440LX chipset Pentium II MB w/SCSI $239
P2L97-D 440LX chipset Dual Pentium II MB $309
P2L97-DS 440LX chipset Dual Pentium II MB w/ SCSI $379

OTHERS

MB 430TX chipset w/512K $79
MB 440LX chipset for PII $129

CPU

INTEL®

Pentium® 166/200/233 MMX . . $98/119/149
Pentium® II 233MHz (OEM) $205
Pentium® II 233MHz (Box) $221
Pentium® II 266MHz (OEM) $249
Pentium® II 233MHz (Box) $269
Pentium® II 300MHz (OEM) $369
Pentium® II 300MHz (Box) $389
Pentium® II 333MHz (OEM) $499
Pentium® II 333MHz (Box) $509
Pentium® II 350MHz (Box) $639
Pentium® II 400MHz (Box) $839

AMD

K6-200/233 MMX. $89/95
K6-266 MMX . . . . . $CALL
Ball Bearing Cooling Fan for Pentium/AMD CPU. . $8
Ball Bearing Cooling Fan for Pentium II CPU. . . . $15

MEMORY

32MB 10NS SDRAM $49
64MB 10NS SDRAM $99
128MB 10NS SDRAM $199

CD-ROM

Acer 24X CD ROM $59
Toshiba 24X CD ROM $62
Toshiba DVD Multimedia Kit $259
Toshiba DVD-ROM (SDM1102) Real Magic MPEG2 card
Toshiba 32X SCSI CD ROM $105

FLOPPY DRIVE

Mitsumi 1.44MB Floppy Drive $19
L/S 120MB floppy drive $109

HARD DISK DRIVE

FUJITSU

MPB3032 3.2GB Ultra DMA $139
MPB3043 4.3GB Ultra DMA $159
MPB3064 6.4GB Ultra DMA $199

VIDEO CARD

DIAMOND MULTIMEDIA

Stealth 3D 2000 Pro PCI 2/4MB $53/69
Stealth 3D 4000 Pro PCI 2/4MB $65/79
Stealth II 220 PCI 4MB. $94
Viper 330 AGP 4MB SGRAM $139
Monster 3D $119
Monster 3D II 8MB. $209
Fire GL 1000 Pro 8MB $179

ATI

3D Xpression+PCI 2/4MB SGRAM. . . $68/79
Xpert@work 4/8MB AGP $125/165
Xpert@play 4/8MB AGP $159/182
All in Wonder Pro 4/8MB. $225/265

OTHERS

S3 chipset PCI SVGA w/ 2MB. $35

SOUND CARD

SoundBlaster 16-PNP. $39
SoundBlastrer AWE64 (value) $79
Acer 3D FX 16-bit Sound card $19

MODEM

USR X2 56K internal w/voice $109
Diamond Supra 56K internal w/voice . . . $73
Rockwell 56K internal w/ voice $59
Rockwell 33.6K internal w/ voice. $39

CASES

Mid Tower Case w/ 230W PS $29
ATX Mid Tower case w/ 230W PS. $59
ATX Full Tower case w/230W PS. $89

KEYBOARD & MICE

Win95 105 Keyboard $11
Keytronic Win95 keyboard $18
Erogonomic Natural keyboard $29
3-button serial mouse $6
Genius 2-button netmouse $10
NEC 2-button mouse $10

SPEAKERS

ALTEC LANSING

ACS45 Power Cube w/ subwoofer. $72
ACS53 Computer SPK w/ subwf $105

YAMAHA

YSTM7W speakers. $39
YSTM15W speakers $69
SYSTEM 45 . . . . . $139

OTHERS

P80W Amplified Speakers $9
P300W Amplified Speakers. $29

MONITORS

SONY

CPD 100ES 15" 0.25 1280X1024 . . . . . $288
CPD 100GS 15" 0.25 1280X1024 . . . . . $345
CPD 200ES 17" 0.25 1280X1024 . . . . . $539
CPD 200GS 17" 0.25 1280X1024 . . . . . $628
GDM 400PS 19" 0.25 1600X1200 . . . . $965
GDM 500PS 21" 0.25 1600X1200 . . . $1399

NEC

M700 17" 0.25 1280X1024 . . . . . $569
E1100 21" 0.28 1600X1200 . . . . . $1069
P1150 21" 0.28 1600X1200 . . . . . $1199

OTHERS

14" 0.28 1024X768 SVGA $129
15" 0.28 1280X1024 SVGA $189

MONTHLY SPECIALS

FUJITSU HARD DRIVE SPECIAL

3-year warranty on all drives

Ultra DMA IDE Hard Drives:

MPA3032 3.2GB. . $139

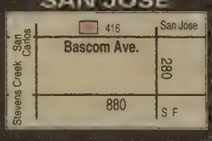
MPA3045 4.3GB. . $159

MPA3064 6.4GB. . $199

SUNNYVALE

505 W. Olive Ave.
Bldg. 100, Suite 123
Sunnyvale, CA 94086
Tel: (408) 733-8882
Fax: (408) 733-6752

SAN JOSE



416 S. Bascom Ave.
San Jose, CA 95128
Tel: (408) 977-0590
Fax: (408) 977-0592

FREMONT

40819 Fremont Blvd.
Irvington Palms Plaza
Fremont, CA 94538
Tel: (510) 623-8297
Fax: (510) 623-8299

OPEN: M-F 9-6 SAT/SUN 10-6 • Financing Available on Approved Credit • $0 Down - Call for Details • Prices subject to change without notice

VISA MasterCard

Net-Enabled Good Deeds From The Small Office

Plus: Gilligan Meets Babelfish

By Birrell Walsh

The San Francisco Street Project's Web server is donated by one volunteer. Other volunteers handle all the coordination and publicity. Many thousands of hours of work have been provided to worthwhile causes throughout the Bay Area. Total budget for the project last year was $200. This is Internet leverage at its best.

For millions of people, the Internet is abolishing spacetime. Distant people used to be days of driving removed, at the far end of a slowly-delivered letter, or long and expensive telephone lines away. But for those on the Internet, connection approaches simultaneity, and cost is very, very low.

The collapse of distance has meant people can join in new combinations. Alliances that wouldn't have been practical just ten years ago are now easy. While most of us run businesses from our small offices, some people have found ways to help others as well.

This month we look in on three imaginative small-office-based Internet programs that help other people, relocate small dogs, and revive local economies.

Readers have also contributed many translation adventures in response to our invitation several issues ago. We will look at some of them.

The San Francisco Street Project

A few years ago in New York some people wanted to help others, but they had limited time. They just could not make the commitment to be a long-term volunteer.

A lot of us would shake our heads at that point and move on. But these people found a way to involve themselves and others in short-term volunteer work through the Internet. The New York Street Project has been replicated in San Francisco, Boston, Chicago, Los Angeles, Philadelphia, and Hong Kong. Projects are now being developed locally in Tampa, Dallas, London, and Haifa.

I first learned of the San Francisco Street Project when a crowd of volunteers from SFSP showed up to answer pledge phones at KQED, San Francisco's public television station. Between pledge breaks, co-chair David Maltz told me how he got into the SFSP. "I really wanted to get involved in my community, but didn't know where to start, so I did a Yahoo! search for 'San Francisco' *and* 'volunteer' and came across the SFSP Web site. I signed up for the Christmas in April project and just got hooked."

The San Francisco Street Project is an all-volunteer network operated entirely on the Internet. People visit the Web page and sign-up. They then receive a monthly email newsletter about upcoming weekend and evening projects that require only a few hours per event.

Volunteers put together the lists of projects that need doing, and volunteers coordinate the arrival of the other volunteers at the sites where work will be done. Projects have included the Salvation Army Gateway, Trips For Kids, Glide Memorial Church, Women's Initiative for Self Employment, and SF Food Bank as well as Christmas in April. The participants are able to make a real contribution without making a long-term commitment. Those who want to do more can join with the agencies being served, or they can help with the Street Project's own effort.

Volunteer publicist Karen Lee says of her experience: "I got involved with SFSP because it is a perfect organization for busy professionals. I get the monthly newsletter via email, and if a project fits into my schedule, then I sign up for it electronically. I am not obligated to commit to any one organization and I can choose not to volunteer without feeling guilty.

"I truly believe in SFSP's operating mode. It does not actively seek donations from its members; it is an organization that tries to serve its community by motivating people to donate time instead of money."

The SFSP's occasionally slow Web server is donated by one volunteer. Other volunteers handle all the coordination and publicity. Many thousands of hours of work have been provided to worthwhile causes throughout the Bay Area. Total budget for the project last year was $200. This is Internet leverage at its best.

The Dachshund Underground Railroad

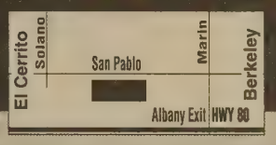
My friend Djovida is a tough, resilient man. When he was laid off from his job at age 50, he responded (after, he says, "giving myself six months to be depressed") by creating his own computer installation and networking business, and a parallel

DJ COMPUTERS

We have built a reputation for quality and service since 1990. We carry only high-quality, brand-name products. Our service department is efficient, reliable, and provides expert repair/installation.

BUILDING COMPUTERS FOR THE FUTURE!

926 San Pablo Ave. • Albany, CA 94706
Phone: 510/527-7697 or 510/527-7698 • FAX 510/527-3299



DJ COMPUTERS P5 Value System

- 166MHz Intel Pentium® Processor w/Fan
- Pentium® Motherboard w/512K Cache
- 3.2MB 72-Pin RAM
- 1.44MB Mitsumi Floppy Drive
- 2.1GB IDE Hard Drive
- 24X CD-ROM
- Trident SVGA Card w/2MB
- 16-Bit Sound Card
- 33.6 Fax Modem
- Hi-Speed 2 Serial, 1 Parallel, 1 Game Port
- Hi-Speed IDE Controller
- 120-Watt Stereo Speakers
- Mini Tower Case w/200W PS
- Microsoft Mouse
- 104 Enhanced Keyboard

$699

DJ COMPUTERS P5 Performer System

- 200MMX Intel Pentium® Processor w/Fan
- Intel TX Chipset Motherboard w/512K Cache
- 32MB 72-Pin RAM
- 1.44MB Mitsumi Floppy Drive
- 3.2GB IDE Hard Drive
- 24X CD-ROM
- Trident SVGA Card w/2MB
- Sound Blaster 16 PnP
- 33.6 Fax Modem
- Hi-Speed 2 Serial, 1 Parallel, 1 Game Port
- Hi-Speed IDE Controller
- 120-Watt Stereo Speakers
- Mini Tower Case w/200W PS
- Microsoft Mouse
- 104 Enhanced Keyboard

$899

DJ COMPUTERS P5 MultiMedia System

- 233MMX Intel Pentium® Processor w/Fan
- Intel TX Chipset Motherboard w/512K Cache
- 32MB 72-Pin RAM
- 1.44MB Mitsumi Floppy Drive
- 4.3GB Ultra DMA Hard Drive
- 24X CD-ROM
- 4MB ATI SVGA Card
- Sound Blaster 64 PnP Sound Card
- 56K Fax Modem
- 120-Watt Stereo Speakers
- Mid Tower Case w/230W PS
- Microsoft Mouse
- 104 Keytronic Enhanced Keyboard
- Windows 95 CD

$1190

DJ COMPUTERS P5 Super System

- Intel Pentium® Processor w/Fan
- ASUS P2L97 Motherboard
- 64MB EDO RAM
- 1.44MB Mitsumi Floppy Drive
- 6.4GB Quantum Ultra DMA Hard Drive
- 24X CD-ROM
- 4MB Matrox Millennium II SVGA Card
- Sound Blaster 64 PnP Sound Card
- 56K Fax Modem w/Voice
- 120-Watt Stereo Speakers
- Mid Tower Case w/230W PS
- Microsoft Mouse
- 104 Keytronic Enhanced Keyboard
- Windows 95 CD

166MMX . . . $1250
200MMX . . . $1290
233MMX . . . $1390

DJ COMPUTERS P II Value System

- Intel Pentium® II Processor w/Fan
- Abit Motherboard w/440LX Chipset
- 64MB SDRAM
- 1.44MB Mitsumi Floppy Drive
- 6.4GB Quantum Ultra DMA Hard Drive
- 32X CD-ROM
- 4MB ATI Expert @ Play AGP SVGA Card
- Sound Blaster 64 PnP Sound Card
- US Robotics 56K Fax Modem w/Voice
- 120-Watt Stereo Speakers
- ATX Case w/230W PS
- Microsoft Mouse
- 104 Keytronic Enhanced Keyboard
- Windows NT 4.0 Workstation

233MHz . . . $1490
266MHz . . . $1590
300MHz . . . $1790
333MHz . . . $1990

DJ COMPUTERS P II Performer System

- Intel Pentium® II Processor w/Fan
- ASUS P2L97 Motherboard
- 64MB SDRAM
- 1.44MB Mitsumi Floppy Drive
- 6.4GB Quantum Ultra DMA Hard Drive
- 32X CD-ROM
- Millennium w/8MB AGP SVGA Card
- Sound Blaster 64 PnP Sound Card
- 56K Fax Modem w/Voice
- 120-Watt Stereo Speakers
- ATX Case w/230W PS
- Microsoft Mouse
- 104 Keytronic Enhanced Keyboard
- Windows NT 4.0 Workstation

233MHz . . . $1590
266MHz . . . $1690
300MHz . . . $1890
333MHz . . . $2090

DJ COMPUTERS P II Web Cruiser w/100 MHz Bus

- Intel Pentium® II
- ASUS Motherboard w/BX Chip & 100MHz Bus
- 64MB SDRAM
- 1.44MB Mitsumi Floppy Drive
- 4.3GB Ultra DMA Hard Drive
- 32X CD-ROM
- 4MB ATI AGP
- Sound Blaster 64
- 56K Flex Fax Modem
- 120-Watt Stereo Speakers
- ATX Mid-Tower
- Microsoft Mouse
- 104 Keytronic Enhanced Keyboard
- Windows NT 4.0 Workstation

300MHz . . . $1790
333MHz . . . $1890
350MHz . . . $1990
400MHz . . . $2190

DJ COMPUTERS P II Dual CPU SCSI w/controller

- Intel Pentium® II Processor w/Fan
- ASUS P2L97 Motherboard
- 32MB SDRAM DIMM
- 1.44MB Mitsumi Floppy Drive
- 4.5 Quantum Ultra Wide Hard Drive
- 32X CD-ROM
- 4MB ATI Expert @ Play SCSI AGP SVGA Card
- Sound Blaster 64 PnP Sound Card
- US Robotics 56K Fax Modem w/Voice
- 120-Watt Stereo Speakers
- ATX Case w/230W PS
- Microsoft Mouse
- 104 Keytronic Enhanced Keyboard
- Windows NT 4.0 Workstation

Dual 233MHz . $2290
Dual 266MHz . $2590
Dual 300MHz . $2790
Dual 333MHz . $3190

- **ALL SYSTEMS CAN BE PICKED UP SAME DAY. NEXT-DAY DELIVERY TO (415) AND (510) AREAS AT NO CHARGE**
- **ON-SITE SERVICE AVAILABLE (MINIMUM $45)**
- **WE NOW PERFORM NETWORK INSTALLATIONS**
- **LET US CUSTOM DESIGN THE PERFECT SYSTEM FOR YOU!**

Upgrades Completed Within One Hour!

DJ COMPUTERS UPGRADE's Prices Include Parts & Labor

- 486DX➡166MMX Pentium® Chip. . . . **$299**
- 386DX➡166MMX Pentium® Chip. . . . **$399**
- Pentium®➡Pentium® II **$529**
- 486➡Pentium® II **$599**

MONTHLY SPECIALS!!

Impression® VISION MONITOR SPECIALS
WITH SYSTEM PURCHASE

Impression Vienna P21S 21" $999
Impression Vienna Pro 17" .25. . . . $549
Impression 7 Plus 17" .27. . . . . $349
Impression 5 Plus 15" .28. . . . . $209
Impression 3 Plus 14" .28. . . . . $159

Monitors Repaired From $5 and up!

ViewSonic Monitor Specials
Please Call!

CUSTOM SYSTEMS ☆ UPGRADES ☆ NETWORKS
TRADE-INS ☆ COMPUTER & MONITOR REPAIR
TEN-YEAR WARRANTY ON LABOR

HOURS:
Mon-Fri 9-6
Sat 12-4

Prices are subject to change without notice.

MasterCard VISA P.O.s

Web page consultancy. He is well on his way to being approved by Microsoft as an MCSE, a Microsoft Certified Systems Engineer. He practices karate and rides hundreds of miles on his bicycle.

So you might be surprised to hear that Djovida and his wife dote on their three miniature dachshunds. He created a Web page for them, and he got involved with one of the Internet's most extraordinary projects, the Dachshund Underground Railroad.

The Dachshund Underground Railroad is coordinated by email and a Web page, and wouldn't be possible without them. A national effort is centered on one small home computer.

Founder Lisa Fitch says, "The network of email mailing lists is how we all seem to find new adoptive families for rescue dachshunds that are out there without a home. The Underground specifically works on the transportation. I get a call or an email that someone wants to adopt a rescued dachsie not from their area. They tell me where the new owner is and where the dog is. I live by the Rand McNally Trip Maker CD. I plot the quickest trip and start emailing people on my database that live along the route. After coordinating everyone the dog is on his/her way home.

"About the group. We are 175 drivers strong right now, in 42 states and two countries. Yep, drivers in Canada as well. I started up the organization in October 1997. We have finished 13 transports."

When I spoke to Djovida the other day, he was scheduled to pick up a dachshund named Tiffany in San Jose and drive her to Santa Rosa. Another volunteer would receive her there and drive her further north, to yet another unpaid chauffeur. Tiffany's eventual destination is Whitefish, Montana. By the time you read this she will have been driven a thousand miles and will be settled in her new home.

Trinity River Community Cooperative

Rural poverty is a serious problem, even in affluent California. Many people moved "back to the land" years ago, and found themselves in beautiful places with little or no economic base. Some returned to the cities; some stuck it out and endured the part-time work and unemployment. They have become locals now, striving to survive along with people who have been resident for generations.

In California's Trinity Alps, some folks are trying a new tack. They are gathering local artisans and marketing their wares through the Internet. I exchanged email with Karen Zimmer, who reports: "Where I live it is in the middle, literally, of the woods, bordering the wilderness areas, right on the Trinity River. If you have never been here, it is as nice as it gets in the summer. Late July, the water is warm and swimming is great, along with rafting of course, and fishing for salmon and steelhead.

"Anyway, to get approval we had to write an action plan for this area. In it we put that we needed technology to keep up with the rest of the world. Luckily for me, I have a lady friend who helped me, and we now have global interface on three computers right here. We just received another grant for forming the Trinity River Community Cooperative, which will market handmade, local items, hoping to import money and export unique and quality items. The Land of the Wild Spirit will be our brand label. Each thing we make, people will take home and feel a part of this environment.

Alliances that wouldn't have been practical just ten years ago are now easy. While most of us run businesses from our small offices, some people have found ways to help others as well.

"We have a long way to go, but for some reason we are the ones everyone is watching to see if we work out. So far we are doing great. We had an Internet Workshop last weekend where we got more than 42 people to show up! It was just great, here in the middle of nowhere, to see the cars lined up. We have so much still to do on the Web pages, but at least it's a start."

The Internet allows small, rural cooperatives and businesses access to markets around the world. The Trinity River Cooperative may be a model for a whole new type of commerce. Locally based people can reach a worldwide constituency for the price of a computer and an ISP hookup. Keep an eye on these people!

"On The Brink Of Madness This Small Boat": More On The Vagaries Of Translation

Several months ago we invited people to visit Alta Vista's Translation Service, a free Web-based translator. It is amazingly good, but like all mortals it slips. If you translate text from English to other languages and back several times, the final result will be only whimsically related to the original. The process is called Babelfishing, after Douglas Adam's mythical translator (and of Alta Vista's translator site).

People from as far away as Great Britain went Babelfishing; here are some of the results they reported:

You begin with an English text, and translate it into one of the seven languages provided. You translate the result back into English. Then you translate the new English version into a second language, and so on, accumulating meaning-drift at each step.

Russell Kavanaugh of Huntington Beach shows how the process works.

"Dear Mr. Walsh:

I really enjoyed your article in the February 27, 1998, issue of MicroTimes. *So motivated, I picked a 25-word phrase to run through the translation Web site you mentioned. I'm sure you will recognize it!*

I tried several variations of order, but was most pleased with my first try, which was simply the order that the languages appear in the selection menu. I especially liked the way the Spanish translation turned "on the edge" to "the brink of madness," which I think is very appropriate for the subject matter of my phrase (or those that have endured endless reruns).

***Original:** Sit right back and you'll hear a tale, a tale of a fateful trip. That started out from this tropic port, aboard this tiny ship.*

***French:** Reposez bien arrière et vous entendrez un conte, un conte d'un voyage fatidique. Cela a commencé dehors à partir de ce port tropical, à bord de ce bateau minuscule.*

***English:** Rest quite back and you will hear a tale, a tale of a fateful voyage. That started outside starting from this tropical port, on board this tiny boat.*

***German:** Rest ziemlich zurück und Sie hören eine Geschichte, eine Geschichte einer fateful Reise. Diese begonnene Außenseite, die von diesem tropischen Kanal, an Bord dieses kleinen Bootes abfährt.*

***English:** Remainder rather back and you hear a history, a history of one fateful journey. This exterior begun, which drives off from this tropical channel, on board this small boat.*

***Italian:** Di resto la parte posteriore e voi piuttosto sentono una storia, una storia di un*

continued on page 88

>>> Upgrades & Repairs While You Wait! >>>

Multimedia Motherboard w/Intel 200MMX CPU w/16-Bit Sound Card, PCI Video Card up to 4MB Share $190

Call for Custom System & Network Configurations! | **Delivery & On-Site Available**

SUPER VALUE SYSTEM

- Intel Pentium® CPU w/MMX Technology
- 32MB 60ns EDO
- **2.7GB Ultra Hard Drive**
- 1.44 Mitsumi Floppy Drive
- 16-Bit Sound Card
- 4MB VGA Card
- Mini-Tower Case
- 24X CD-ROM, Toshiba
- 104 Keyboard, Mouse
- 100 Watt Stereo Speakers

P-200 MMX $490
P-233 MMX $530
We Beat Brand Name Prices & Service!

DREAM MULTIMEDIA

- **Pentium® Chip-Based PCI Motherboard**
- **512K Pipeline Burst Cache**
- Intel™ Triton TX Chipset
- 32MB EDO RAM
- 4.3GB Ultra DMA Hard Drive
- S3 Virge 3D PCI Video w/2MB
- Built-in IDE/IO Controller (16550)
- 24X Toshiba CD-ROM
- MCD 16-Bit Sound Card w/100 Watt Speakers
- 1.44 Floppy Drive
- 15" SVGA .28 Non-Int. Color Monitor 1280x1024 w/Digital Control
- Mini-Tower Case w/250W Power
- 104 Key Windows 95 Keyboard
- Mouse w/Pad
- Over 500 Titles Value CD

P5-233MMX .....$780 **P5-200MMX 740**

SUPER POWER MULTIMEDIA

- 32MB SDRAM
- 4.3GB EIDE Fast Ultra DMA/33
- 32X Toshiba CD-ROM
- **US Robotics 56.6 Fax Modem, Internet Ready**
- Diamond Stealth 3D 4MB SGRAM
- 16-Bit Sound Card
- Speakers 320W 3D
- 1.44MB 3.5" Floppy Drive
- Mid-Tower Case with Power Supply
- Keytronics Keyboard for Windows 95
- Microsoft Mouse with Pad
- Free CD Deluxe Pack

Pentium® II-400 Asus P2B98 ATX.....$1880
Pentium® II-350 Asus P2B98 ATX.....$1640
Pentium® II-333 Asus P2L97 ATX.....$1249
Pentium® II-300 Asus P2L97 ATX.....$1199
Pentium® II-266 Asus P2L97 ATX.....$1099
Pentium® II-233 Asus P2L97 ATX.....$999

DELUXE MULTIMEDIA

- **512K Cache TX Chipset**
- **32MB EDO RAM**
- **4.3GB Fast IDE Hard Drive, WD**
- PCI IDE with I/O
- PCI SVGA Card w/1MB
- **24X Toshiba CD-ROM**
- 16-Bit Sound Card & Speakers
- 1.44MB 3.5" Floppy Drive
- 14" SVGA .28 Non-Int. Color Monitor
- Mini Case with 230W PS
- FCC 104 Keyboard
- Mouse with Pad
- Over 500 Titles Value CD

P5-233MMX.....$730 **P5-200MMX.....690**

VALUE SYSTEM

- **Pentium® Chip-Based Intel™ PCI Motherboard**
- **512K Pipeline Burst Cache**
- **Intel™ Triton Chipset TX**
- **32MB EDO RAM**
- **4.3GB Ultra DMA Hard Drive**
- 1.44MB 3.5" Floppy Drive
- Built-in IDE/IO Controller (16550)
- PCI SVGA Card w/1MB, 64 Bit
- **14" SVGA .28 Non-Int Color Monitor**
- Mini Case with 230W PS
- FCC 101 Keyboard
- Mouse with Pad

P5-233MMX.....$630 **P5-200MMX.....590**

★ SUPER SALE ★

HEWLETT PACKARD

- **HP 890Cse Printer.....$380**
- **HP 6Lse Printer.....355**
- **HP 722Cse LaserJet Printer.....280**
- **HP 672C Printer.....190**
- **FlashPoint LW Ultra SCSI Card.....250**
- **8GB External Tape Backup, Conner.....400**

SOFTWARE (w/System Purchase)

Windows 95 Full Copy CD Version	$80
Dos 6.x	30
Office Professional 97 CD Version	190
Windows 3.x	40
Windows for Workgroups	48
Windows NT 4.0 Server CD	480
Windows NT 4.0 Workstation CD	180

MOTHERBOARD w/o CPU

ASUS

SP-97V w/Video & 512K w/3 ISA, 4 PCI	$84
TXP4-97 w/512K w/4ISA, 4 PCI & SDRAM	105
TX97-E w/512K w/4 ISA, 4 PCI	119
TX97-X w/512K w/4 ISA, 4 PCI & SDRAM	125
P2L97 P-II w/ 1 AGP, 2 ISA, 5 PCI	146
P2L97S P-II w/2940UW 1 AGP, 4 PCI, 2 ISA	237
P2L97DS Dual P-II w/AGP & UW 4 PCI 2 ISA	370
Pentium® 571TX/Sound/4MB PCI	75
Pentium® 572TX/Sound/512K	75
New Pentium® Motherboard supports 90-233MHz	80

MEMORY/CACHE

2x32 60ns, 72-pin, 8MB/EDO	$19
4x32 60ns, 72-pin, 16MB EDO	24
8x32 60ns, 72-pin, 32MB EDO	40
32MB SDRAM	45
64MB SDRAM	95

CPUs

Intel™ (with M/B Purchase)

Intel™ P5-200 MMX	$CALL
Intel™ P5-166/233MMX	CALL/CALL
Intel™ Pro-200	CALL
Pentium® II 233/266/300/350/400	CALL

CASE & POWER SUPPLY

Mini Tower Case w/230W PS Dig.	$22
Mid Tower Case w/250W PS Dig	37
Full Tower Case w/250W Dig.	49
250W Power	19
ATX Case w/250W PS Dig.	56

FLOPPY DRIVE

1.44 MB	$18

MOUSES

3-Button/Microsoft	$5/19

HARD DRIVES

2.7GB IDE Ultra DMA	120
3.1GB IDE Ultra DMA	135
4.3GB IDE Ultra DMA/33	145
6.3GB IDE Ultra DMA	210
4.3GB UW SCSI Seagate	250

KEYBOARDS

Mitsumi 104 Windows 95 Keyboard	$10
Keytronics 104-Enhanced Win 95	16
MS Natural Keyboard	57

TAPE BACKUPS

Colorado

DJ-25 3000 3.2GB	$165

VGA CARDS

S3 w/1MB Cirrus Logic	$22

Diamond

S3 Virge 3D 64 PCI, 2MB DRAM Video	40
Stealth 3D 2MB DRAM	57
Stealth 64 PCI 4MB SGRAM	85
Stealth 3D 2000 Pro 4MB	72
Fire GL 1000 Pro 4/8MB AGP/PCI	140/180
Moster 3D 4MB	150

ATI

Pro Turbo w/TV 4MB SGRAM	115
XPERT Work 4MB PCI/AGP	125/135
XPERT Play P2TV 4MB PCI 3D	139

SPEAKERS

Deluxe Speakers	$5
100-Watt Stereo Speakers	13
320-Watt 3D Stereo Speakers	26

CD-ROM/SOUND CARD

Sound Card 32 Bit PCI	$30
SoundBlaster 64 AWE	60
16-Bit Sound, Win 95, PnP	16
24X/32 Toshiba CD-ROM Drive	60/70
4X8 CD Recorder	225
DVD Kit Toshiba	275
Headset/Microphone	16

CD TITLES

Over 100 New Titles in Stock

Eureka Pack Over 500 Titles CD Pack.....$20

Compton Interactive Encyclopedia, Contraption Zack, D/Generation, Epic, F29 Retaliator, Life & Death II, The Brain, Mavis Beacon Teaches Typing, Might & Magic II, Push Over, Robo Cop 3D, The Chess Master 2100, The Chess Master 3000, US Atlas, World Atlas

UPGRADING CHARGES

Labor charges are the following:

CPU & Memory Upgrade	FREE
System Diagnostic Checkup	$10
Multimedia Kit Installation	20
Installation for HDD	10
Video Card + Driver Setup	10
Install Motherboard	20
Install Floppy Drive	10
Install New & Power Supply	10
Install Tape Drive/Fax/Modem	10
Install Software/Setup	25
System Troubleshooting	30

MONITORS

14" Super VGA 1024x768 .28, MGC	$135
15" SVGA/Dig 1280x1024 .28, MGC	165
17" SVGA/Dig Decaview .28	290

NEC

17" A700 .28	455
17" E700 .25	550
21" E1100/P1150	1000/1120

SONY

15" CPD-100ES .25	290
15" CPD-100GS .25 1280x1024	340
17" CPD-200ES/200GS .25	520/595
19" GDM-400PS .25	900
21" GDM-500DS .25	1320

VIEWSONIC

15GS 15" ED55 .28	250
G773 17" 1280x1024 .26 G	430
P775 17" 1600x1280 .25 P	480
G810 21" 1600x1280 .25	1020
P815 21" 1600x1280 .25	1180

Monitor viewable size may be smaller advertised size.

FAX MODEM

56K Fax Modem w/Voice Supra PCI	$70

US Robotics

Sportster 56K w/Voice Int/Ext	125/175

NETWORKING

3COM

3C900 Etherlink III PCI TP	$78
3C905-TX PCI 10/100 TP	65
16-Bit PCI 10/100	25

Terms & Conditions: Prices and availability subject to change without notice or obligation. Shipping, COD & insurance are extra and are not refundable. Prices reflect cash discount. All returns must have prior authorization. All returns must be in original packaging and complete. 15% restocking charge on returns after 3 days. Not responsible for typographical errors. Pentium® is a registered trademark of Intel Corporation.

Hours:
M-F 9-5:30
Sat 10-4

VISA MasterCard

AMERICA COMPUTER

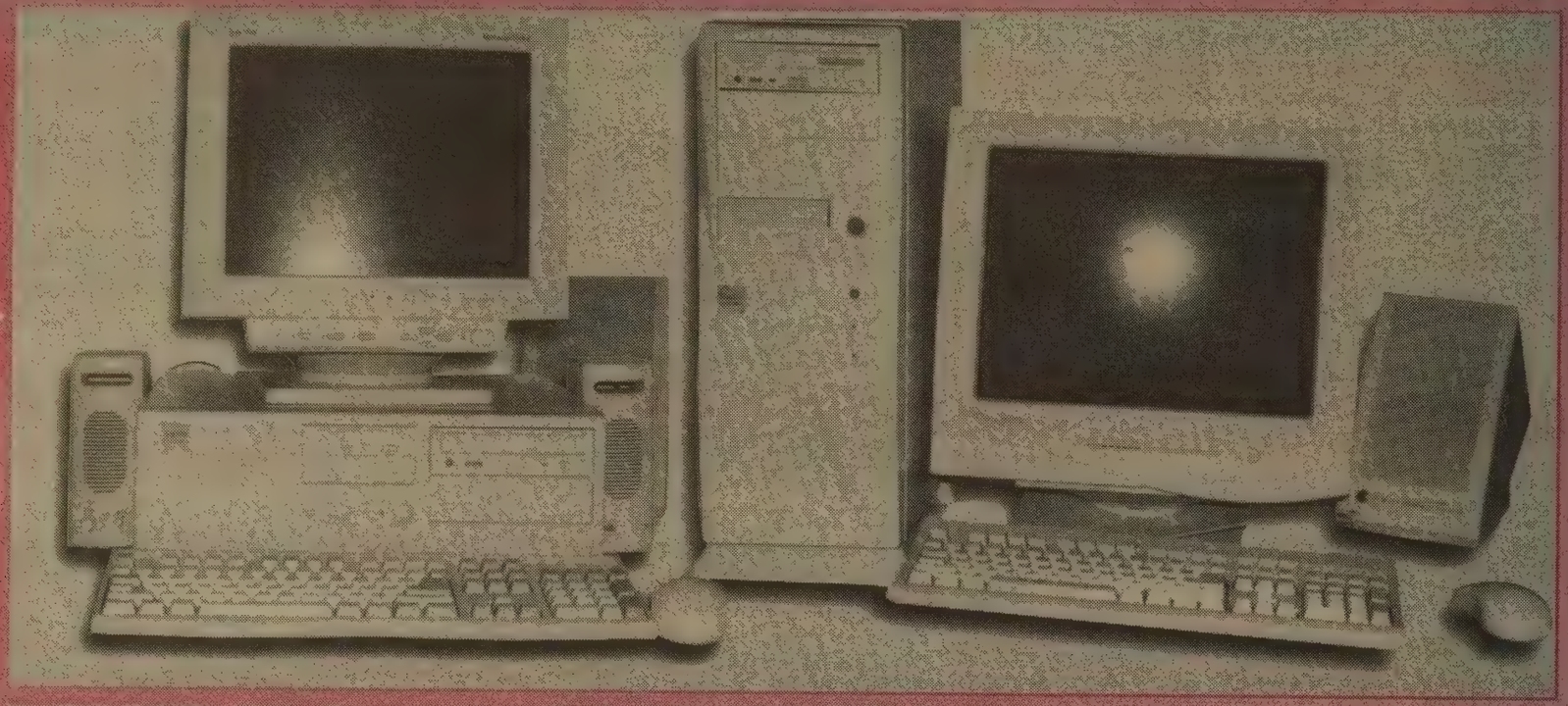
4450 Enterprise Street #108, Fremont, CA 94538

(510) 226-0258 Fax: (510) 226-0261

www.AMERICA-COMPUTER.com • e-mail: AMECOM@AOL.com

Since 1994

STARLITE ELECTRONICS



STARLITE MIRAGE #1
PENTIUM® II HOME SYSTEMS
233MHz Intel Pentium® II Processor

Intel 440LX AGP w/Two USB Port
512K Pipeline Burst L2 Cache
Built-in Enhanced IDE I/O PnP BIOS
32MB of SDRAM (10ns)
3.2GB UDMA Hard Drive(10ms)
3.5" 1.44MB Floppy Drive
Trident 9750 3D 4MB SGRAM AGP
15" 1024x768 .28 NI Monitor (17" +$169)
Toshiba 24X EIDE CD-ROM Drive
Yamaha 16 Bit 3D Sound Card
Amplified 100w Speakers
MS Windows 95 CD w/Manual
Mitsumi104 Win95 Keyboard
Mitsumi PS2 Mouse/Pad
56K Fax/Modem PnP
ATX Tower Case w/235 PS
Two Months free Internet Access

$999

333MHz $1359
300MHz $1199
266MHz $1059

STARLITE MIRAGE #2
PENTIUM® II OFFICE SYSTEMS
266MHz Intel Pentium® II Processor

ASUS P2L97 440LX AGP w/Two USB Port
512K Pipeline Burst L2 Cache
Built-in Enhanced IDE I/O PnP BIOS
32MB SDRAM Memory (64MB +$49)
4.3GB UDMA Hard Drive (10ms)
3.5" 1.44MB Floppy Drive
Diamond Stealth 4000 3D 4MB SGRAM AGP
17" 1280x1024 .28 NI Monitor (15.9" v.i.s)
Sound Blaster 16 3D Sound Card
Toshiba 32X IDE CD-ROM Drive
MS Windows 95 CD w/Manual
KeyTronics 104 Win95 Keyboard
Microsoft Intellimouse PS2 Mouse/Pad
US Robotics 56K Fax/Modem PnP
Amplified 100W Stereo Speakers
ATX Tower Case w/235W PS
Two Months free Internet Access

$1399

333MHz $1699
300MHz $1539
233MHz $1349

STARLITE MIRAGE #3
PENTIUM® II WORKSTATION
300MHz Intel Processor

ASUS P2L97 440LX AGP w/Two USB Port
512K Pipeline Burst L2 Cache
Built-in Enhanced IDE I/O PnP BIOS
64MB of SDRAM (10ns)
6.4GB UDMA Hard Drive (10ms)
3.5" 1.44MB Floppy Drive
Diamond Viper V330 4MB SGRAM AGP
Viewsonic G771 17" 1280x1024 .27 NI Monitor
Sound Blaster 16 Sound Card
Toshiba 32X EIDE CD ROM
MS Windows 95 OS2 CD w/Manual
Keyboard 104 Win95 Keyboard
Microsoft Intellimouse PS2 Mouse/Pad
US Robotics 56K Fax/Modem
Yamaha M7 Speakers w/Subwoofer
ATX MID Tower Case w/235W PS
Iomega 100MB ZIP Drive w/One Cartridge
Two Months free Internet Access

$1899

333MHz $2049
266MHz $1769
233MHz $1719

STARLITE MIRAGE #4
PENTIUM® II DVD SYSTEMS
333MHz Intel Pentium® II Processor

ASUS P2L97 440LX AGP w/Two USB Port
512K Pipeline Burst L2 Cache
Built-in Enhanced IDE I/O PnP BIOS
64MB of SDRAM (10ns)
8.4GB UDMA Hard Drive (10ms)
3.5" 1.44MB Floppy Drive
ATI XPERT @ PLAY 4MB SGRAM AGP
Viewsonic P775 17" 1600x1280 .25 NI Monitor
Sound Blaster AWE 64 Sound Card
2X DVD-ROM Drive and Decoder Card
MS Windows 95 OS2 CD w/Manual
MS Natural 104 Win95 Keyboard
Microsoft Intellimouse PS2 Mouse/Pad
US Robotics 56K Fax/Modem
Yamaha M45 Speakers w/Subwoofer
ATX MID Tower Case w/235W PS
Two Months free Internet Access

$2599

300MHz $2459
266MHz $2299
233MHz $2259

STARLITE MIRAGE #5
PENTIUM® II ULTRA SYSTEMS
350MHz Intel Pentium® II Processor

ASUS P2B98 440BX AGP w/Two USB Port
512K Pipeline Burst L2 Cache 100 Bus
Built-in Enhanced IDE I/O PnP BIOS
32MB of SDRAM PC 100(7ns)
4.3GB UDMA Hard Drive
3.5" 1.44MB Floppy Drive
Diamond Stealth 4000 3D 4MB SGRAM AGP
17" 1280x1024 .26 NI Monitor
Sound Blaster 16 Sound Card
Toshiba 32X EIDE CD ROM
MS Windows 95 CD w/Manual
Keyboard 104 Win95 Keyboard
Microsoft Intellimouse PS2 Mouse/Pad
US Robotics 56K Fax/Modem
Amplified 100W Speakers
ATX MID Tower Case w/235W PS
Two Months free Internet Access

$1899

400MHz $2099

STARLITE MIRAGE #1
BUDGET SYSTEMS
200MHz Cyrix M2 Processor
With MMX Technology

Intel Triton 430TX 512K L2 Cache
Built-in Enhanced IDE I/O PnP BIOS
16MB of EDO RAM
1.2GB IDE Hard Drive (2.0GB +20)
3.5" 1.44MB Floppy Drive
Trident 9680 PCI 2MB DRAM Video Card
14" 1024x768 .28 NI Monitor (15" +$59)
24X EIDE CD-ROM Drive
16 bit 3D Sound/100w Speakers
US Robotics 33.600 Fax/Modem
Windows 95 OS2 CD w/Manual
Mitsumi 104 Win95 Keyboard
MS Compatible Serial Mouse/Pad
Mini Tower Case w/230W PS
Two Months free Internet Access

$659

Cyrix M2 233MHz MMX $699
Cyrix M2 266MHz MMX $799

STARLITE MIRAGE #2
K6 HOME SYSTEMS
233MHz AMD K6 Processor
With MMX Technology

Intel Triton 430TX 512K L2 Cache
Built-in Enhanced IDE I/O PnP BIOS
32MB of SDRAM
3.2GB UDMA Hard Drive
3.5"1.44MB Floppy Drive
Trident 9680 PCI 2MB DRAM
15i 1028x1024 .28 NI Monitor
Toshiba 24X EIDE CD-ROM Drive
16 bit 3D Sound/100w Speakers
56K Fax/Modem PnP
Windows 95 OS2 CD w/Manual
Mitsumi 104 Win95 Keyboard
Logitech Serial Mouse/Pad
Mini Tower Case w/230W PS
Two Months free Internet Access

$799

AMD K6-266MHz MMX..... $899
AMD K6-300MHz MMX..... $999

STARLITE MIRAGE #3
PENTIUM® OFFICE SYSTEMS
233MHz Intel Pentium® Processor
With MMX Technology

ASUS TX97E 430TX 512K L2 Cache
Built-in Enhanced IDE I/O PnP BIOS
32MB of SDRAM (10ns)
4.3GB Ultra-DMA Hard Drive (10ms)
3.5" 1.44MB Floppy Drive
Diamond Stealth 2000 Pro 3D 2MB PCI DRAM
15" 1280x1024 .28 NI Monitor (13.9" v.i.s)
Toshiba 24X IDE CD-ROM Drive
Sound Blaster 16 3D Sound Card
Amplified 100W Speakers
US Robotics 56K Fax/Modem PnP
KeyTronics 104 Win95 Keyboard
Logitech Serial Mouse/Pad
Windows 95 OS2 CD w/ Manual
Mid Tower Case w/250W PS
Two Months free Internet Access

$999

200MHz MMX..... $969

STARLITE MIRAGE #4
PENTIUM® II ULTRA PRO SYSTEMS
400MHz Intel Pentium® II Processor

ASUS P2B98 440BX AGP w/Two USB Port
512K Pipeline Burst L2 Cache
Built-in Enhanced IDE I/O PnP BIOS
64MB of SDRAM PC 100 (7ns)
8.4GB UDMA Hard Drive (10ms)
Mitsumi 1.44MB Floppy Drive
MATROX Millennium II 4MB WRAM AGP
Viewsonic P775 17" 1600x1280 .25 NI Monitor
Sound Blaster AWE 64 Sound Card
Toshiba 32X EIDE CD-ROM
MS Windows 95 OS2 CD w/Manual
Microsoft Natural 104 Win95 Keyboard
Microsoft Intellimouse PS2 Mouse/Pad
US Robotics 56K Fax/Modem
Yamaha M25 Speakers w/Subwoofer
ATX MID Tower Case w/235W PS
Two Months free Internet Access

$2899

350MHz $2699

STARLITE MIRAGE #5
POWERPRO SERVERS
333MHz Intel Pentium® II Processor

DUAL PROCESSOR/RAID CAPABLE (option)
ASUS P2L97DS 440LX AGP w/Two USB Port
512K Pipeline Burst L2 Cache
Built-in Enhanced IDE I/O PnP BIOS
On-Board UW SCSI II PCI Controller
6 Expansion Slots: 4 PCI/2 ISA
64MB ECC EDO MEMORY
WD 4.5GB Ultra-Wide SCSI II Hard Drive
Mitsumi 1.44MB Floppy Drive
Diamond 4000 3D 4MB SGRAM AGP
Toshiba 32X SCSI CD-ROM Drive
3Com 905 10/100 PCI Ethernet Adapter
KeyTronics 104 Win95 Keyboard
Microsoft Intellimouse PS2 Mouse/Pad
ATX FULL Tower Case w/300W Redundant Power Supply
MS Window NT Server 4.0 10 USER (option)

$2499

300/266Mhz $2359/2239
233MHz $2199

NEW STAR NOTEBOOKS SPECIAL

CHEMBOOK 3300

BEST BUY

- 200MHz Pentium Processor w/MMX
- 12.1" SVGA Active Matrix TFT Display
- 32MB EDO Memory
- 256KB L2 Pipeline Burst Cache
- 2.1GB Removable HDD to 3GB
- PCI EDO 2MB Graphics Accelerator
- With 65K Color 800x600
- 3.5 1.44i Floppy Drive
- 20X EIDE CD ROM Drive
- 2 Type II & Type III slot
- 16 Bit sound w/Stereo Speakers
- NIMH Battery/Adapter/Carrying Case
- Win95 Keyboard/Touchpad
- Infrared FIR/RCA Jack
- WxDxH: 11.7"x9.4"x1.8". Weight: 7lbS
- Microsoft Windows 95 OS2 CD w/Manual
- Upgrade to 64MB ..... add $99
- Upgrade to 3GB HDD ..... add $59

START AT **$1459**

CHEMBOOK 6800/9750/2600 . . $1599

KIWI 680C 11.3" TFT/166MHz . . . $1399

PII ARMNOTE TS758

- 266MHz PENTIUM II PROCESSOR
- 14.2" XGA TFT Active Matrix Display
- Supports Intel Pentium II Deschutes Mobile IMM
- Processor 300/266/233MHz
- Support Intel Tillamook Mobile IMM Processor
- 233/266 MHz
- 64MB of SDRAM Memory up to 256MB
- 512KB L2 Pipeline Burst Cache
- 4.0GB UDMA Removable HDD
- 3.5 1.44" Floppy Drive
- PCI EDO 4MB Graphics Accelerator
- With 16M Color 1024x768
- Modular 24X EIDE CD ROM Drive (Smart Bay)
- Can Install DVD ROM/ZIP/2nd HDD/2nd Battery
- TV-out Video-In and Teo USB Ports
- 16 Bit Full Duplex 3D Surround sound
- Built-in 1MB Wavetable/Stereo Speakers
- 2 Type II & Type III slot/IrDA/FIR
- Li-ion Battery/AC Adapter/Carrying Case
- Win95 Keyboard/Touchpad
- WxDxH: 12.6"x9.9"x1.9" Weight: 8.3lbS
- Microsoft Windows 95 w/Manual
- Upgrade to 96MB ..... add $99

START AT **$3299**

15.1" LARGER SCREEN CHEMBOOK 7000

- 233MHz PENTIUM PROCESSOR W/MMX
- 15.1" XGA TFT Active Matrix Display
- 512KB L2 Pipeline Burst Cache
- 3GB UDMA Removable HDD
- 32MB of SDRAM Memory up to 128MB
- 3.5 1.44" Floppy Drive
- PCI EDO 4MB Graphics Accelerator
- With 16M Color 1024x768
- 20X EIDE CD ROM Drive
- TV-out Video-In and Teo USB Ports
- 16 Bit Full Duplex 3D Surround sound
- Built-in 1MB Wavetable/Stereo Speakers
- 2 Type II & Type III slot/IrDA/FIR
- Li-ion Battery/AC Adapter/Carrying Case
- Win95 Keyboard/Touchpad
- WxDxH: 14.1"x10.8"x2.0" Weight: 9.9lbS
- Microsoft Windows 95 w/Manual
- Upgrade to 64MB. ..... add $99
- Upgrade to 4GB HDD ..... add $99

START AT **$2699**

14.1" TFT 200MHz MMX/32MB/2GB ..... ONLY $1899

ALL-IN-ONE CHEMBOOK 9780

- 233MHz PENTIUM PROCESSOR W/MMX
- 14.1"SVGA TFT Active Matrix Display
- Support Intel Tillamook Mobile IMM Processor
- 233/266 MHz
- 32MB of SDRAM Memory up to 256MB
- 512KB L2 Pipeline Burst Cache
- 3GB UDMA Removable HDD
- 3.5" 1.44 Floppy Drive
- PCI EDO 4MB Graphics Accelerator
- With 16M Color 1024x768
- Modular 24X EIDE CD ROM Drive (Smart Bay)
- Can Install DVD ROM/ZIP/2nd HDD/2nd Battery
- TV-out Video-In and Two USB Ports
- 16 Bit Full Duplex 3D Surround sound
- Built-in 1MB Wavetable/Stereo Speakers
- 2 Type II & Type III slot/IrDA/FIR
- Li-ion Battery/AC Adapter/Carrying Case
- Win95 Keyboard/Touchpad
- WxDxH: 12.4"x10.2"x2.2" Weight: 7.4lbS
- Microsoft Windows 95 w/Manual
- Upgrade to 64MB ..... add $99
- Upgrade to 4GB HDD ..... add $99

START AT **$2399**

12.1" TFT 200MHz MMX/32MB/2GB ..... Only $1799

FAX/MODEMS

- 56K FAX/MODEM Int. $59
- US Robotics Sportster 33.6Int. $69
- US Robotics Sportster 56K Int. $89
- 56K PCMCIA Fax/Modem $99

HARD DRIVES

- 540MB/810MB/1.2GB. $79/89/109
- 3.2/4.3GB UDMA FUJITSU. $139/169
- 6.4GB UDMA Western Digital $229
- 2.1GB/3GB/4.GB/5GB (NOTEBOOK) .... $199/$259/$359/$659
- 4.5GB/9GB SCSI II Western Digital $499/799

KEYBOARD/MOUSE

- Mitsumi 104 win95 Keyboard. $10
- KeyTronics 104 win95 Keyboard. $15
- Microsoft Natural 104 win95 Keyboard (w/system) $35
- Microsoft Compatible 3-Button Mouse . $5
- Mitsumi PS2 Mouse $9
- Logitech PS2/Serial 3-Button Mouse . $15
- Logitech Cordless Mouseman $59
- Microsoft Serial/PS2 Mouse (w/system) $20/22
- Microsoft PS2 IntelliMouse (w/system)$25

MEMORY/CPU

- 1MB(1X3)/1X9/4MB(4X3) 30PIN . $3/5/10
- 8MB/16MB/32MB EDO 72PIN (60ns) $15/29/49
- 32MB/64MB/128MB 168PIN SDRAM (10ns) $49/109/229
- 32MB/64MB/128MB PC100 (7ns) $99/199/Call
- AMD K6-233/266/300MHz MMX. ... $99/179/259
- Intel P5 200/233MHz MMX $109/149
- Intel PII 233/266/300/333MHz $219/269/399/539
- Intel PII 350/400 MHz $639/859

MONITORS

- 14" 1024X768 .28 SVAG NI $119
- 15" 1280x1024 .28 SVGA NI $159
- 17" 1280x1024 .28 SVGA NI $299
- Iiyama S901 G 19" .26 ..... $739
- MAG DX700T 17" $569
- NEC A500/A700 ..... $269/469
- Nanao T2 17" .25. ..... $799
- Sony 17" 200GS 1280x1024 .25 ... $599
- Viewsonic 15GS 15" 1280x1024 .28. $279
- Viewsonic G771 17" 1280x1024 .27. $419
- Viewsonic G790 19" 1600X1280 .26 $769
- Viewsonic G810 21" 1600x1280 .26. $969

MOTHERBOARDS

- ASUS P2B 98 440BX Pentium II 233-400MHZ $199
- ASUS P2L 97 440LX Pentium II 233-333MHZ $149
- ASUS TX97 E 512K 75-233MHZ. ... $129
- ASUS TX97 XE 512K 75-233MHZ ATX $149
- ASUS SP97 512K 75-233MHZ $79
- Intel Atlanta AL440LX Pentium II ... $159
- M-701 440LX Pentium II 233-333MHz $109
- FIC P-2007 1MB Cache 75-233MHz . . $99
- Triton TX 512K PCI 75-233MHZ w/Sound $79

MULTIMEDIA

- Sound Blaster 16Bit 3D ISA/PCI . . $35/39
- Sound Blaster AWE 64/Gold . . . $69/139
- Toshiba 24X IDE CD ROM $59
- Toshiba 32X IDE CD ROM $69
- Creative DVD ROM Kit $279
- YAMAHA 3D 16 BIT Sound Card. ... $15
- YAMAHA M7/M45 ..... $39/149

VIDEO CARD

- ATI Xpert @ Play 4MB SGRAM AGP/PCI $159/149
- ATI Xpert @ Play 8MB SGRAM AGP/PCI $199/189
- DIAMOND FIRE GL 1000 PRO 4MB/8MB SGRAM AGP. $139/179
- DIAMOND FIRE GL 1000 PRO 4MB/8MB SGRAM PCI $139/169
- DIAMOND Stealth 3D 2000 PCI 2MB $59
- DIAMOND Stealth 3D 4000 AGP 4MB $89
- DIAMOND VIPER V330 4MB AGP/PCI $159
- MATROX Millennium II 4MB WRAM (oem) $159
- MATROX Millennium II 8MBWRAM PCI (Retail) $239
- TRIDENT 9680 1MB DRAM MPEG ... $22
- VGA to TV Card $79

TAPE DRIVE/TAPE

- Iomega Zip 100MB Int. w/one Cartridge $89
- LS120MB w/one 120MB Disk. $99
- Colorado T3000 3.2GB/Tape $179
- Colorado T3000 1.4GB/Tape $139
- Colorado 350MB/Tape $79
- Teac 800MB/Tape. $99

TAPE CARTRIDGE

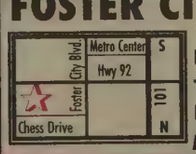
- 350MB/800MB/1.4GB. $25/35/40
- Iomega 100MB Zip $14
- 120MB Disk. $14
- 1.44MB Floppy Disk (10pcs) $5

MISCELLANEOUS

- Imager 30bit Color Scanner $99
- ISA/PCI Ethernet Card (Combo). . . $19/30
- 3C905 TX PCI 10/100 TP $63
- Mitsumi 3.5" 1.44MB Floppy Drove . . $17
- Mini Tower 230W PS $25
- Mid Tower 250w PS. $39
- Full Tower 250w PS $59
- ATX Tower 235 PS. $55
- Adaptec 2940UW SCSI. $169
- ISA IDE I/O $15
- PCI IDE $15
- Removable HD Kit IDE $19

CORPORATE AND GOVERNMENT PURCHASE ORDERS WELCOME

FOSTER CITY LOCATION



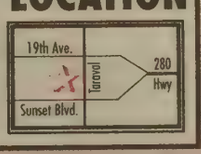
1161 Chess Dr., Ste. D,
Foster City, CA 94404
Tel: 650-372-9289
Fax: 650-372-9778
M-F 9-6 • Sat. 10-4

One Year Part and Labor Warranty on Systems and Notebooks.
Lifetime Hardware Phone Support.
Please visit our web site for more option
www.starlite-electronics.com

Prices subject to change without notice. Not responsible for typographical errors.
Credit Card prices are different from cash on systems and parts.

SAN FRANCISCO LOCATION

2121 Taraval Street,
San Francisco, CA 94116
Tel: 415-665-9289
Fax: 415-664-4018
M-F 9-6 • Sat. 10-5



continued from page 84

viaggio fateful. Questo cominciato esterno, che elimina da questa scanalatura tropicale, a bordo di questa piccola barca.

***English:** Of rest the posterior part and you rather feel one history, one history of a travel fateful. This begun external, that it eliminates from this tropical rabbet, to edge of this small boat.*

***Portuguese:** Do descanso a parte e você posterior sentem rather um history, um history de um curso fateful. Este externo começado, aquele que elimina desta ranhura tropical, à borda deste barco pequeno.*

***English:** Of the rest the part and posterior you feel to rather one history, one history of a course fateful. This external one started, that one that it eliminates of this tropical groove, to the edge of this small boat.*

***Spanish:** Del resto la pieza y el trasero que usted se siente a algo una historia, una historia de un curso profético. Éste externo comenzó, aquél que elimina de este surco tropical, al borde de este barco pequeño.*

***English:** Of the rest the piece and the buttock that you feels like to something a history, a history of a prophetic course. This one external one began, that one that it eliminates of this tropical furrow, on the brink of madness this small boat."*

The Internet allows small, rural cooperatives and businesses access to markets around the world. The Trinity River Cooperative may be a model for a whole new type of commerce. Locally based people can reach a worldwide constituency for the price of a computer and an ISP hookup.

Thank you Mr. Kavanaugh for yeoman work! For other respondents, space allows only the English they began with and the final result.

Rev. L. Lee Sissel in Alaska said of his wife: "I love Tonya because she is a woman of great beauty and worth." After a number of translations he had, "Master to Tonya, because the great beauty is and a value of the woman." He also translated "Seventy-six trombones led the big parade" just into Portuguese and back, and got "Seventy-six trombones had lead to the great stop."

Tim Lavalli of San Francisco translated the Saturday Night Live line, "Would you like a wolverine?" into Spanish and back, and got, "You have taste of wolverine?" And, "oh boy does I like wolverine."

Deborah Diemand in Vermont started with, "The driver gave the lab a blow upside the head when it lost its lunch in the cab." A few excursions later she had, "The manager gave to the laboratory, which is upstream from impact the heading, when he destroyed his lunch in the cab."

continued on page 183

FREE Windows Based Catalog Now Available

FastLink Network Products

Network Products for Less!

VISA MasterCard AMERICAN EXPRESS Cards Welcome

10 Base-T Twisted Pair Ethernet

3COM 3C509B-TP0 Single/5/20-Pk 60/283/1,049
3C509B TP&BNC/5/20-Pk 72/341/1,299
3C529B TP/ MCA/5-Pack/30Pk 230/987/5,480
3C900-TPO/5PK/20PK 94/410/1,472
INTEL EE Pro/10+ w/o Flash TP/5-Pk 57/264
EE Pro/10+ w/o Flash 20-Pk/80-Pk 956/3,630
SMC EtherEZ 10BT Single/5Pk 59/276
EtherEZ 20-Pk/50-Pk 1,020/2,359
EtherEZ Combo/5Pk/20Pk/50Pk 68/324/1,202/2,735

Fast Ethernet 10/100 MegaBit Cards

3COM 3C515 Etherlink 10/100 ISA Single/5-pk 162/770
3C515 Etherlink 10/100 ISA 20-pk 2,841
3C905BTX 10/100 PCI Single/5-Pk 97/455
3C905BTX 10/100 PCI 20pk/60pk 1,599/4,773
3C597 10/100BaseT EISA/5-Pk 246/1,187
ADAPTEC ANA-6944A/TX 100BTX PCI 4-Port 911
AsanteFAST 10/100 PC & MAC PCI/5-Pk 151/738
COMPAQ Netelligent PCI 2 port 10/100 295
INTEL EExpress Pro 10/100 PCI/5-pk 87/414
EExpress Pro 10/100 PCI 20Pk/80Pk 1,400/5,120
EExpress Pro 10/100 EISA 260
EExpress Pro 100 PCI Server card/5Pk 358/1,681
EExpress Pro 100 Plus PCI 10/100/5Pk 91/436
EExpress Pro 100 Plus PCI 10/100 20Pk 1,607
OLICOM OC-2335 MCA 10/100 Fast Ethernet Card 240
SMC 9432 PCI Single/5/20/50Pk 70/328/1,162/2,650

Fast Ethernet Hubs

3COM Office Connect 4 100TX ports/8 100BTX 204/367
Office Connect TP1200 12 100TX ports 537
3COM 3C250C-TX 12 100 BASE TX Stackable Hub 798
3C250C-TX 24 100 BASE TX Stackable Hub 1,169
ASANTE AsanteFast 12-pt 100BTX/16 Port 700/1,016
BAY NETWORKS BayStack 202 12 100BTX 1,270
CISCO Fasthub 16 100BTX 828
HP AdvanceStack 12 100BTX/with MGMT 1,026/2,052
AdvanceStack 24 100BTX (J3272A) 1,530
INTEL Express 8 port stand alone hub 100BaseTX 480
MICRODYNE Century 6 Port 100BaseTX hub 364
NETGEAR FE104 4 100BTX/FE108 8 100BTX 139/231
FE508 8 100BTX StackableFE516 16 100BTX 464/754
SMC EZ Hub 100 8-pt 100BTX Hub 282
TIGERSTACK 100 12-pt 100BTX SMC5312TX 1,116
TIGERSTACK 100 24-pt 100BTX SMC5324TX 1,784

10/100 Dual Speed Hubs

3COM Office Connect 8 Port Dual Speed Hub 533
12-pt Hub 500 10/100 12/24 Ports 846/1,257
CISCO Fasthub 112T 12 10/100 Ports 862
124T 24 10/100 Ports 1,320
COMPAQ Netelligent 2724 24 port Dual Speed Hub 1,746
D-LINK 8 Port Dual Speed/16 Port Dual Speed 446/750
Intel Express 10/100 Hub 12-pt/24-pt **(5/30)** **774/1,022**
SMC 12 Port 10/100 hub 900

Token Ring

3COM 3C319 TokenLink Velocity Single/5-Pk 218/1,050
3C339 Tokenlink Velocity XL PCI TR/5-pk 164/819
IBM Turbo TR 16/4 Type1/ 3 Single/PCI 216/296
INTEL Token Express Pro 16/4 ISA 271
PROTEON P1394+ Token Ring 16/4/10-Pk 218/2,129
SMC Token Ring Elite 16/4 Single/12-pack 220/2,431

PC Card/Card Bus Adapters

3COM 3C589 PC Card 10BT/COMBO 137/186
3C389 Tokenlink Velocity PC Card 283
3C562D-TP PC Card Enet 33.6/Fax/5-Pk 274/1,285
3C574-TX PC Card XL 10/100 Single/5PK 157/745
3C575-TX Card Bus XL 10/100 Single/5PK 157/745
IBM PC Card Coax/TP Adapter 242/261
Turbo 16/4 TR PCMCIA2 Adapter 294
INTEL EtherExpress Pro/100 Mobile 16-BIT 150
EEPro/100 Mobile 16BIT 5PK/20PK 714/2,610
EEPro/100 Mobile 32BIT SINGLE 158
EEPro/100 Mobile 32BIT 5PK/20PK 756/2,691
XIRCOM Pocket Adapter III 10BaseT 291
Pocket ENET III COMBO(BNC & 10BaseT) 325
PC Card IIPS 10BaseT/Combo/TR 147/183/346
CREDITCARD ENET 10/100+ FLEX/56MODEM 342
PC Card Enet 33.6 Modem & Fax 10BT/Combo 279/315
Card Bus 10/100BTX (CBE-10/100BTX) 199

Ethernet Hubs/Concentrators

3COM SuperStack II Entry Hub 12/24 ..... 218/342
Office Connect TP4 3C16704 4 10BaseT 63
Office Connect 8-pt Hub TPO/TPC/TPM 83/122/397
OfficeConnect 16 TP, 1 BNC 214
SuperStack II PS Hub 40 12-pt/24-pt 502/884
SuperStack II PS Hub 50 24-pt 1,189
SuperStack II Hub 10 24-pt/Mgmt Module 660/466
Redundant Power Supply 1,032
ASANTE 8-Port w/AUI&BNC/12-Ports/24 Ports 121/211/323

ADDITIONAL SAVINGS ON THESE POPULAR ITEMS

3Com

SuperStack Switch 3300 12 port 10/100 stackable switch is now available at $ 1,759.
Buy a 20 Pack of the Fast Etherlink XL 3C905B-TX featuring Wake On LAN and get a 12 Port Dual Speed 500 hub FREE! ($1,275 Value)

CHEYENNE

Get a Free Inoculan 25 User Client Pack via mail with the purchase of CA Protection Suite. Offer ends June 30th.

Get up to $100 back via mail-in rebate on selected Cheyenne ArcServe products

BAY NETWORKS CG1001E01 BayStack 12-pt 595
CG1001E02 BayStack 24-pt 982
800 8-pt /2800A 16-pt 195/572
HEWLETT PACKARD 10BaseT Hub 12 (J3300A) 264
10BaseT Hub 12M 12 Managed Ports (J3301A) 491
10BaseT Hub 24 (J3302A)/ 24M (J3303A) 399/759
AdvanceStack 8-port/16-port 138/295
AdvanceStack 12-pt/24-port 461/868
AdvanceStack Switch Module for 12-pt or 24-pt Hub 662
AdvanceStack Management Module J2603 466
AdvanceStack w/Mgmt Module 12-pt/24-pt 530/934

Ethernet Switches

3COM SSII Switch 1000 12 10BT, 1 100BTX **(PROMO)** . **769**
SuperStack II Switch 3000 12-pt 10/100 Switch 1,385
SuperStack II Switch 3000 8-pt 100BTX 2,036
SuperStack II Switch 3000 5-pt 100BFX 6,022
SuperStack II Desktop Switch 24TP,1 100BTX 1,247
SuperStack II Switch 320 12 10BT, 2 10/100BTX 726
OfficeConnect Switch 140 4-10BT,1-100TX 745
ASANTE ReadySwitch 4 RJ45, 1 Fast Ethernet 1,253
IntraStack 6014 DSB 12 10/100 ports 2,455
BayStack 301 22 10BT, 2 100BTX 2,727
BayStack 302 8-10BT, 1-100BTX 1,772
BayStack 303 24 10BT, 1 10/100BTX 1,138
BayStack 304 12 10BT, 1 10/100BTX 906
BayStack 350T 16PT 10/100BaseTX switch 1,897
BayStack 350F-HD 24PT 10/100BaseTX switch 3,414
CISCO CATALYST1912 12 10BT/1 100BTX 1,230
CATALYST 1924 24 TP,1-100BTX,1-100FX 1,998
CATALYST 1924 24 10BaseT,2-100BTX 1,596
CATALYST 1924 24 10BastT, 2-100BTX RMON 2,147
HP AdvanceStack Switch 208 8-10BT,1-100BTX 780
AdvanceStack Switch 224 24-10BT, 1-100BTX 1,201
AdvanceStack 800T 4 100BTX, 4 Open 1,560
AdvanceStack 2000 6-slot chassis 1,776
AdvanceStack 2000 2 100BTX module J3191A 888
AdvanceStack 2000 4 10BT module J3102A 888
NPI Nuswitch FE200TT PLUS 2 10/100 ports 375
FE200TF PLUS 1 10/100 TX & 1 10/100 FX 680
FE-210 2-100,10-10BT/FE-106 1 100, 6 10BT 900/899
FE-224 2-100TX, 24-10BT 1,306
FE-600 + 5-100TX, 1 Open slot 833
NETGEAR SW510 8 10BT + 2 10/100BaseTX 619
SW518 16 10BT + 2 10/100BaseTX 923
FS102 2 10/100 + 2 uplink/FS104 4 10/100 ..... 252/458
FS508 8 10/100 + 1 uplink 1,223
SMC EZSwitch (6408TT) 8-10BT, 2 100BaseTX 670
EZSwitch (6416TT) 16-10BT, 2 100BaseTX 923
TigerSwitch 8+8TX, 8 10BT+8 100BTX switch 1,339

Stackable Fast Ethernet Switches

3COM SSII Switch 1100 12 10BT, 2 100BTX 1,099
SSII Switch 1100 24 10BT, 2 100BTX ports 1,307
SSII Switch 3300 12 ports 10/100BTX ports 1,759
SSII Switch 3300 24 ports 10/100BTX ports 2,575
SSII Switch Matrix Cable/Module 100/743
SSII Switch 3900 24 10/100 ports, 1 GBit port 5,354
SSII Switch 3900 36 10/100 ports, 1 GBit port 6,443
INTEL ES510T 24 PORT 10/100 Stackable Switch 2,638
ES500MTX 4 PORT 10/100 Module for 500 Switch 694
ES500MFX 2 PORT 100FX Module for 500 Switch 1,039
ES500MSI Stack interface Module to stack 2 switch 208

Tape Backup Solutions

CHEYENNE ARCserve v6.1 NLM 10 Users 271
ARCserve for NW Single Server, Unlimited Users 340
ARCserve for IntranetWare for Small Bus 241
ARCserve v6.1 WRKGRP-Up to 25/Over 25 ..... 479/1,156
Changer Option for ARCserve/Push Agent 423/300
Windows NT Agent for ARCserve 330
NetWare Server Suite(Arcserve, Faxserve, Inoculan) 615
Open File Agent for NW/Disaster Recovery 426/324
SEAGATE Backup Exec 1 Server 25 Users 329
Backup Exec Single Server/Enterprise NLM 462/922
Backup Exec Autoloader Option 393
Disaster Recovery Option for NetWare 327
STAC Replica for NetWare/Multi-Server Option 419/713
EXABYTE EXB-8700LT 8mm 7-14GB drive only 720
EXB-8700SW 8mm 7-14GB w/ Server software 1,002
HP C1554 DDS3 4mm 12-24GB DAT Int/Ext 1,045/1,145
C5648A 72-144GB DDS3 autoloader 2,744
C1559 Surestor Ext 72-144GB DDS3 autoloader 3,593
C1536 DDS 4mm 2-4GB DAT Int/Ext 635/735
C1599 DDS2 4mm 4-8GB DAT Int/Ext 748/848
C1553 24-48GB Autoloader Int/Ext 2,230/2,530
SEAGATE INT. AIT 50GB WIDE SCSI2 2,575
INT. SIDEWINDER AIT 200GB WIDE SCSI2 5,321
EXT. SIDEWINDER AIT 200GB WIDE SCSI2 5,817
SONY SDT-9000 4mm DDS3 24GB Int/Ext 1,372/1,417
SDT-9000 w/Arcserve Enterprise Int/Ext 2,329/2,432

Remote Access

3COM Office Connect Boundary Router 3C8841A 1,244
Office Connect Remote 511 ENET,ISDN ..... (5/31) **337**
Office Connect Remote 521U ENET, ISDN, POTS **478**
Office Connect Remote 531U ENET, ISDN, ASYNC **467**
Office Connect Remote Dual Analog 547
ARTISOFT InSync Modemshare 1/2/4/8Pt . 138/198/383/560
CISCO 2501 1 ENET, dual serial router (software req) ..1,906
2514 2 ENET, dual serial router (software req) 2,340
EMULEX Connect Plus 2 ports/8 Ports 582/2,262
NOVELL NetWare Connect 2 309
NetWare Connect 8/32 pts 1041/3,405
NetWare Connect 2-port w/Modem and Serial I/O 845
NetWare Connect 8-port w/Modem and Serial I/O 2,912
SHIVA Netmodem/E 28.8/AccessPort/D Enet 871/690
Lanrover/E Plus w/2 Async ports/4 Async 1,334/2,532
Lanrover/E Plus w/2 v.34/8 PT w/4 v.34 ..... 1,771/3,320
Lanrover/E Async 8 Async/8 v.34 modems 2,810/4,528
DIGI INTERNATIONAL Digi 2-Pt/4-Pt/8-Pt 200/455/588
Acceleport 8EM w/RISC CPU, DB25 ISA/PCI 673/673

WAN Connectivity

3COM Impact IQ 3C882 216
ASCEND Pipeline 15 w/ 2 POTS ports NT1 325
Pipeline 25-FX Bridging 457
Pipeline 50 w/NT1, COMP, IPX,IP/ with Firewall 604/946
Pipeline 50 w/ 1 Lease 56 & 1 SW56 1,196
Pipeline 75 Multi IPX, IP, 2 Analog 679
Pipeline 75 Multi IPX, IP, 2 Analog with Firewall 1,026
Pipeline 130 w/FT1,T1,ISDN 1,386
Pipeline 130 ISDN & L56/SW & L56 ..... 1,342/1,412
Max 200 Plus w/4 BRI Cards 3,043
CISCO 762 ISDN Rtr/Cisco 766 w/2 Analog Pts 544/668
Cisco 772 4-10BT/Cisco 776 4-10BT, 2 Analog 622/746
HP AdvanceStack Internet Router Card J3138A 2,773
SHIVA Lanrover/E Plus 1-BRI ST, v.34, 3 CHAN 1,918
Lanrover/E Plus 2-BRI ST, 4 Channels, Enet 2,075
Lanrover/E Plus 4-BRI ST, 8 Channels, Enet 3,929
US ROBOTICS Sportster ISDN adapter 188
DataBurst Ext. Parallel Port ISDN w/NT1 275
Paradyne 7610 56/64K DDS CSU for Frame Relay 336
3150 T-1 Frame Relay CSU 1,157
ADC KENTROX D-SERV FrameRelay 56/64CSU/DSU 347
D-SERV FrameRelay up to T1 CSU/DSU 978

Internet Solutions

3COM OfficeConnect ISDN LAN modem 419
Gateway 535 ISDN IPX to IP 1,453
BAY NETWORKS Instant Internet 100 1 ENET/ISDN 757
100 w/ 1 Enet, 33.6/1 Enet w/ 56K x2 ..... 602/757
20 Usrs 1 Enet w/33.6k/2 Enet W/ 33.6 ..... 1,896/2,086
20 Users, 1 Enet w/ ISDN/2ENET w/ ISDN 2,200/2,403
100 Users w/ Dual-Enet & DDS support 3,159
100 Users w/ Dual-Enet & T1 CSU/DSU 3,821
CISCO Microweb Server 907
FARALLON Netopia Internet Router IP/Appletalk 1,061
Netopia Internet Rtr TCP/IP 29-Users/.Unlimited 664/867
RAMP Networks WebRamp Entre 672
WebRamp IP ISDN Router/IPX Router 598/1,169
WebRamp M3 IP Rounter w/ 3 Serial ports 342

Network Printing Solutions

CASTELLE Office Connect Print Server (2P) 276
LANpress 3P/100 (10/100BTX) 374
HEWLETT PACKARD JetDirect 150X 1 port, IPX 172
JetDirect EIO 10/100 Print Server J3113A 344
JetDirect 10BT MIO/COMBO 339/389
JetDirect Card for 10/100Base-TX J2556B 407
JetDirect Ethernet EX Plus/ EX Plus 3 ..... 245/357
JetDirect Token Ring EX/EX Plus3 ..... 567/682
INTEL Netport Express Pro 10BT Int(MIO)/3 Pack 299/747
NetportExpress Pro 10BT Ext. 2P/1S/3 Pack 391/1,068
NetportExpress Pro 100 10/100BTX 1P/3Pack 273/739
NetportExpress Pro 100 10/100BTX 2P/1S 390
NetportExpress Pro 100 10/100BTX 3PK 1,068
NetportExpress Pro Token Ring 548

Network Fax Solutions

3COM Office Connect Fax Server (1L) 1,277
CASTELLE FaxPress 1500 1-Line/2-Line 1,970/2,365
Faxpress 3000 2-line/FaxPress 3000 4-line 2,948/3,574
Faxpress 3500 2-line/FaxPress 3500 4-line 3,434/4,088
CHEYENNE FaxServe NLM 5/10/25 ..... 393/717/1,177
FaxServe NLM 50/100/250 ..... 1,816/2,533/3,801
FaxServe for WinNT 5/10/25/50 Users 240/421/846/1,331
LANSOURCE FAXport 5 Users/10 Users 273/406
FAXport 25/50/100 ..... 676/999/1,300
FAXport 4 modem add-on 204
FAXport 5 User add-on/Unlimited Users 204/1,900

Uninterruptible Power Supplies

APC Back-UPS 400/450/600 ..... 151/185/256
Back-UPS Pro 420/650/1000/1400 ..... 251/310/404/521
Powerchute Plus for Novell/Unix/Windows NT 99/149/99
Smart-UPS 700NET/1000NET/1400NET 389/540/671
Smart-UPS 2200NET/3000NET 1,067/1,788
Matrix 3000/5000/Smartcell 3,720/4,616/537
SNMP Agent for Novell/SNMP Mgr for Netware 125/145

Cable Testers & Supplies

RJ45 10 BaseT Connectors (100 pak) 40
10Base-T Cable (1000' min) LV3/LV 5 ..... 100/200
FLUKE LAN CableMeter 620/CableMeter 650 ..... 728/1,760
MICROTEST Cable Tester 300
Penta Scanner w/Super Injector 3,019

E-Mail

MS Exchange Server Single w/ 5/10/25 ..... 1,014/1,368/2,160
Exchange Server Enterprise w/25/50 Clients 4,099/5,429
Exchange Add'l Clients 5/20 ..... 366/1,160

Network Management

3COM Transcend Workgroup Mgr for Windows 461
Transcend Enterprise Mgr for Windows 2,453
HP Openview Pro Suite 1,037
INTEL LanDesk Mgmt Suite 5/10/100 users 522/696/4,240
LanDesk Server Manager Pro 864

Network Utilities

CHEYENNE AuditWare for NDS 100/Enterprise 460/851
Directory Mgmt. Combo/Enterprise 850/1,951
InocuLAN Wrkgrp/1Svr-Unlimited 301/**575**
InocuLAN 5 Svr-Unlimited Users 2,363
InocuLAN Option v4.0 for AS 6 for NW **286**
INTEL LanDesk Virus Protect Single Svr NW&NT 329
Single Svr w/ unlimited clients 1,055
Client Access License for LanDesk Virus Prot 5/25 ..... 94/482
SEAGATE Prepare! Disaster Recovery SW 459

VINCA Server Mirroring

CHEYENNE ArcServe Replication for NT 1,798
VINCA Campus Standby Server Software for NW 2,955
Standby Server NetWare/Windows NT 2,954/2,586
Entry StandBy Server/SnapShot Svr for NW 985/757
Standby Server Many-To-One 5,172
CO-Standby Server for NT 2,990

Windows NT Solutions

3COM Transcend Workgroup Mgr for NT 463
Transcend Enterprise Manager 2,353
CHEYENNE Arcserve for Windows NT v6.5, Single Svr 340
Arcserve for Windows NT v6.5, Enterprise Edition **675**
Arcserve Storage Suite-Backoffice Sm Bus. 5 Usr 242
Arcserve Storage Suite-Backoffice Sm Bus. 25 Usr 394
Arcserve Push Agent for NT or NetWare 300
Arcserve Changer Option for Windows NT 365
Arcserve Disaster Recovery Option for NT 236
InocuLAN for Windows NT 1 Svr/Option for NT **575/286**
Open File Agent for Windows NT 421
Protection Suite for Exch Single/Enterprise 1,183/1,600
INTEL Landesk Workgroup Mgr 25 1,615
LANDesk Virus Protect NT 1,028
MICROSOFT Windows NT Workstation 317
Windows NT Server w/5/10 Clients 810/1,128
Windows NT Client Single/20 Clients 34/658
SMS System Mgmt Server w/5 Clients 943
Proxy Server for NT4 995
SEAGATE Backup Exec for NT 1 Svr/Ent 493/864
Backup Exec Autoloader for NT 434
Open File Manager for NT/ Disaster Recovery 425/328

Servers/Network Computers

HP Netserver E45 PENTIUM2/233, 32MB,SCSI,24X 1,636
Netserver E45 PENTIUM2/233, 32MB,4GB,24X 1,992
Netserver E45 PENTIUM2/266, 32MB,SCSI,24X 1,758
Netserver E45 PENTIUM2/266, 64MB,4GB,24X 2,161
ACER PowerFlex 4000 P2/200 MMX,32MB, 4.3G, 24XCD, Sound & 10/100 Ethernet built-in 899
ACER PowerFlex 4000 P2/233 999

- LOWEST PRICE GUARANTEE ! ASK FOR DETAILS.
- Over 50,000 items from over 700 vendors. Call us for those hard to find items. Our computerized catalog can locate them within seconds.
- VISA, MC & AMEX Accepted. NEVER A SURCHARGE.
- Same day shipping & NEXT DAY guaranteed delivery available on most orders.
- Courtesy TERMS available to Government, Education, & Fortune 1500 Accounts.

1-800-788-LANS

HRS: M-F 8:00 AM TO 6:00 PM PACIFIC TIME
ADDR: 90 South Spruce Avenue, Suite N
South San Francisco, CA 94080
PHONE: 650-872-1376 FAX: 650-872-6634
email: fastlink@ix.netcom.com

- Fortune 1500 companies, Government, & Education P.O. accepted on approved credit.
- International orders accepted. Payment by AMEX or Wire Transfer.
- Restocking fee applies to all non-defective returns and refused shipments. OPENED SOFTWARE IS NOT RETURNABLE.
- Prices & Specifications subject to change without notice.
- We are not responsible for typographical errors.
- Shipping & Handling charges will be added to all orders.
- Quantity pricing available for 10 units or more

Internet Email Strategies

Simple Techniques For Better Results

By Auren Hoffman

When I say mass mail I don't mean "spam," which I hate and do not condone. I mean sending out relevant information to people that actually signed up for it, in which you are honest about your intentions, the email address the mail is coming from, and you personalize the message.

One of the Internet's most powerful functions is electronic mail. Email can give you a quick and cheap way to make contact with your customers.

With all the talk of the World Wide Web, Java, and Internet telephony—electronic mail is still the best means of communicating ideas directly to customers, clients, and colleagues. What email lacks in two-way interaction it makes up in simplicity and effectiveness.

Email allows a site like ours at BridgePath to send out thousands of job announcements every day; it also allows companies to deliver targeted promotional offers to their customers.

You can send targeted electronic mail directly to people in your database by building a query with off-the-shelf tools from companies like Netscape, Allaire, NetDynamics, Microsoft, and others. For example, take a site where you have a login and a password for members. As the site operator, you want people to return often—so you might send a message to all your members who haven't logged into the site in the last month. Something like:

From = "*bob@EMAILisCool.com*"
To = "<Recipient's email>"
Subject = "Have not logged in"

Dear <First Name>,

We noticed you haven't logged into EMAILisCool since <Date of Last Login> and we thought that you might benefit from our new content.
Just a reminder, your Login ID is <Login ID>.
Please visit *http://www.EMAILisCool.com* today.
Thank you.
Bob Smith
EMAILisCool
http://www.EMAILisCool.com
bob@EMAILisCool.com
This message was sent to <Recipient's Email>.

In this example, we might mail all the people that have signed up to be members of the EMAILisCool site—not including people who have signed up in the last three months or who have logged into the site in the last month. Basically, we want to mail reminders to members who were once interested in the EMAILisCool site but have now lost interest or forgotten about the site. We don't want to lose these old customers, and we want to get them back to the site.

Notice the mail message. The first thing you will see is that it comes directly from Bob Smith and not from some general mailbox. You want the mail message to be as personalized as possible (hence the addition of the customer's first name) and people like to get mail from other people—not from some random system.

I like the feature of including the email address the message was sent to at the end of the message. I have over 40 email addresses and most of them forward to the same spot—so it is nice to see what email address I used when I registered at a particular site.

Also notice the URL is listed twice and the URL begins with "http://". I hate getting URLs without the "http://" because then I can't click on them directly from the email client. Does the sender actually expect me to copy and paste the URL? The objective of this email message is to get the customer to visit the Web site—so make it as easy as possible for them.

Sending out a message like the one above is guaranteed to get you more traffic to your site.

Optimizing Flow

Of course email is not without its quirks, negatives, hardships, or flaws. One big problem is that if you have a slow mail server, sending mass mail can be a real drain on your server. If you are sending out 20,000 emails a day, like we do at BridgePath, this could be a real problem. Many languages like Cold Fusion and ASP can be very

continued on page 183

GOLDEN MICRO COMPUTERS

BEST SERVICE IN TOWN

5-Year Labor & 1-Year Parts Warranty on All Computers

Complete Business Services

• Networking • Installation • On-Site Service

Complete Repairs & Upgrades

MONTHLY SPECIAL

P5-200MMX Intel Tucson System — $699

- 64MB EDO RAM
- 4.3GB Hard Drive
- 2MB PCI VGA
- Yamaha Sound
- 32X CD-ROM Drive
- 33.6K US Robotics Fax/Modem
- Stereo Speakers
- Keyboard, Mouse

P6 MULTIMEDIA SYSTEMS

- Intel Atlanta MB & Intel CPU
- 512K Cache
- 64MB SDRAM
- 8.4GB EIDE HD w/Ultra DMA
- Teac 1.44 Floppy
- ATI all in one 8MB AGP (tv/vcr)
- 17" SVGA monitor (1280x1024 .28)
- 32X CD-ROM
- Build in Yamaha sound
- 60 Watt speakers
- ATX Medium Tower case
- Keytronic Keyboard & PS/2 mouse

Pentium® II 233(LX/BX) . $1599/1669
Pentium® II 266(LX/BX) . $1639/1709
Pentium® II 300(LX/BX) . $1769/1839
Pentium® II 333(LX/BX) . $1899/1969
Pentium® II 350(BX) $2199
Pentium® II 400(BX) $2399

P5 MULTIMEDIA SYSTEM

- P-5 Motherboard w/512K Cache
- Pentium® Processor Based Systems
- PCI and ISA Bus
- 32MB EDO RAM
- 4.3GB Hard Drive
- 1.44 Floppy Drive
- 14" NI SVGA Monitor .28
- Diamond Edge 3D PCI Video w/2MB w/Sound
- 2S, 1P Ports
- Mini-Tower or Desktop Case w/230W PS
- Enhanced 104 Keyboard
- 24X Toshiba CD-ROM
- 80-Watt Stereo Speakers

P5-90 ..... $769
P5-133 ..... $799
P5-166MMX $839
P5-200MMX $849
P5-233MMX $889

RACK-MOUNT PC

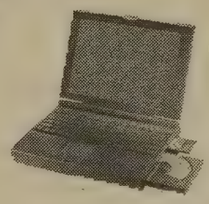
Passive Backplane
14 Slots ISA Only..... $89
14 Slots ISA/PCI $129

CPU Cards
486DX4-100/DX2-66 All-in-one $229
P5 75-200MHz PCI/ISA $349
Pentium® Pro 200 w/VGA $790
Pentium® II 233-300MHz PCI/ISA $990

Monitors Enclosures
19" Rack-Mount PC Chassis $239
19" Rack-Mount Monitor Enclosure..... $270
Rack Mount 14" Monitors
10.4" Color TFT LCD Monitor $1799
10.4" Color TFT LCD Monitor w/Touch Panel $2359

Notebooks

- Pentium® 200MMX-233MHz
- 12.1" Dual Scan Display
- 2MB VGA Video RAM
- 2.1GB Hard Drive
- 20X CD-ROM
- 32MB EDO RAM
- 1.44 Floppy Drive
- 16-Bit Sound Built In
- AC Adaptor • Battery • Case



$1499

for 12.1" Active ..... Add $300
for 13.1" Active ..... Add $800
for 14.4" Active ..... Add $1200

Notebook Accessories

RAM
8MB $65
16MB $95
Docking Station $299

Hard Drive
2.1GB $229
3.1GB 2.5" 269

Fax Modem
14.4K $79
33.6K/56K $99/189
EtherNet Card $99
Earphone w/Microphone $25

IBM/TOSHIBA/COMPAQ RAM/HARD DISK AVAILABLE!

CD-ROMs

HP IDE 6x4x2 Rewritable $425
Yamaha SCSI 6x4x2 Rewritable $559
Panasonic SCSI 8x4 Recordable..... $359
Blank CD (740MB) $1.99
12X/24X/32X SCSI CD-ROM .. $79/109/119
12X/24X/32X IDE CD-ROM $59/79/89

MULTIMEDIA

Sound Blaster 16PnP $49
Sound Blaster AWE 64PnP $59
16-Bit Sound Card $25

SPEAKERS

60/80/240 Watt..... $15/25/35

CASE & POWER SUPPLY

Mini Tower Case w/230 Watts $30
Super Mini Tower Case w/230 Watts..... $35
Desktop Case $25
Medium Tower Case w/230 Watts..... $45
Full Tower w/250 Watts..... $65
Medium ATX w/230 Watts..... $79
Full ATX w/250 Watts $99
200/230/250/300 Watts Power supply..... $20/23/28/59
HD Pull Out Removable Box $22
250/300 Watt ATX Power Supply UL $45/59
Ext HD /CD-ROM Case IDE/SCSI $75
450 VA UPS (Uninterupted power) $89

MODEMS

14.4K Int/Ext $29/39
33.6K w/Voice..... $49
33.6K/56K Ext US Robotics..... $99/199
33.6/56K Int USR w/Voice $85/125
56K Flex..... $79

TAPE DRIVES

Colorado T4000 4GB..... $389
Iomega Ditto 3.2GB..... $159

MOTHERBOARD & CPU

386DX33/40 ..... $20
486SX/DX25/33 ..... $50
486DX4-100 M/B ISA/PCI/VLB&CPU $85
P5-90/133/512K..... $139/149
P5-166MMX 512K $179
P5-200 512K $189
P5-200MMX 512K $189
P5-233MMX 512K $229
P6-PRO-180 VENUS 256K..... $259
Pentium® II 233 Atlanta/Seattle $479/469
Pentium® II 266 Atlanta/Seattle $439/509
Pentium® II 300 Atlanta/Seattle $569/639
Pentium® II 333 Atlanta/Seattle $699/769
Pentium® II 350 Seattle $899
Pentium® II 400 Seattle $1099

HARD DRIVE

2.1/2.5GB IDE $145/169
3.2/3.5GB IDE $179/189
4.3/6.4GB IDE $219/249
8.4GB IDE..... $349
2.1/4.3GB SCSI $229/399
6.4/9.0GB SCSI $499/769
100MB Zip DR (EPP/SCSI) $149/149
100MB Zip DR (IDE)..... $89
100MB Cartridge..... $13
1.0GB Jaz Drive $319
1.0GB Jaz Cartridge $119

FLOPPY DRIVES

TEAC 1.44..... $25
TEAC 1.2 New/Used..... $39/9

MONITORS

14" Non-Int..... $139
15" Non-Int..... $229
15" NEC XV Plus..... $259
17" Non-Int SVGA(.28/.26)... $289/329
17" Sony 200GS(1280x1024,.25) . $599
21" Non-Int SVGA 1600x1280 .28 . $999

KEYBOARDS

104 Enhanced /PS2..... $15
104 Keytronic/PS2 ..... $22
101 Maxswitch $25

VGA CARDS

MGP..... $15
1MB ISA/VLB/PCI $19/19/30
ATI all in one(tv/vcr)8MB AGP $279
Xpert@Play 8MB AGP $199
Diamond 3D 2/4M WRAM $59/69
Fire GL 1000 Pro 8MB AGP..... $199
Matrox Millennium 4/8MB $159/249
ATI AGP w/4MB Up to 8MB All-in One w/TV,VCR $249
1MB VGA RAM..... $15

MISC.

IDE/IO ISA $15
IDE/IO VLB..... $15
B/W Scanner..... $49
Color Scanner (Hand Held) $99
Flat-Bed Scanner (EPP/SCSI)..... $169
9-Pin Printer Alton 2000 ..... $69
HP670C $229

NETWORKING PRODUCTS

Ethernet 16-Bit Combo Card $28
3Com 3C509 Combo..... $59
3Com 3C905TX Combo..... $69
Ethernet 10BT Hub 8/16 Ports . $99/199
3Com 8/12/24 Ports..... $194/339/1099
Novell Netware 4.1 10/25 Users..... $699/899
10' Cable (TP)..... $19

NETWORKING SERVICES

- On-Site Service Available
- Windows 95, Windows NT, Windows for Workgroups, & Novell Specialist
- Network Design & Installation
- System Troubleshooting & Maintenance
- Special Discounts for Systems Purchased

46560 Fremont Blvd, Suite 408 • Fremont, CA 94538

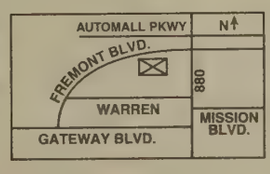
(510) 623-0866 (800) 588-0866

FAX (510) 623-0321

www.GOLDENMICRO.com • email: sales@goldenmicro.com

Hours M-F 9:00-5:30 Sat 10-3

Ad reflects cash discount. • Prices subject to change without notice. • Not responsible for typographical errors. • Pentium® is a registered trademark of Intel Corp.



GOLDEN MICRO COMPUTERS Since 1991

Turning The Car Bu

Auto-By-Tel's Customer-Friendly Digital Revolution

By Mary Eisenhart | Photos: Ann Summa/Gamma-Liason

Pete Ellis thinks he has a better way for you to buy your next car. So far, upwards of a million customers agree with him. ♣ If you've ever bought a car the old-fashioned way, you probably haven't forgotten the experience, which despite the best intentions of all concerned is rarely pleasant. ♣ You may have found the dealer from reading a newspaper ad, seeing a TV spot, or just passing by, but once you were inside the door, you were almost certainly set upon by a two-legged piranha determined to browbeat you into buying a car then and there. If you managed not to flee (no doubt realizing that just down the street was another dealership and another piranha), you'd discover that the relationship of actual information to sales pitch was fairly insignificant, that the relationship of the sticker price to any money that had ever changed hands in real life was a carefully guarded secret, and that the louder this guy claimed to be your bosom pal the more diligently you watched your wallet. ♣ If your determination to buy a car was such that you survived the ministrations of the

siness Upside Down

salesman, the closer, the financing czar, and the person trying to sell you add-ons, you eventually drove off the lot in your new wheels, absolutely certain your brother-in-law would gloat that you'd paid too much. ✣ And, if the shopping experience wasn't noxious enough from the customer's standpoint, it was no day at the beach for the dealer or the salesperson, either. The salesperson, being on straight commission, was under tremendous pressure to part you from the largest possible number of bucks while convincing you that you were getting an incredible deal; the dealer, carrying a huge overhead while also under tremendous pressure from the manufacturer, was similarly incented. ✣ In short, what should have been a symbiotic relationship turned out to be adversarial in the extreme. Which provides the classic scenario for an Internet Business Opportunity. ✣ The most appealing potential of the personal computer in general, and the Internet in particular, is the ability the technology gives individuals to bypass traditional inefficiencies, circumvent informational priesthoods, be more nimble than larger and more established entities, and, in general, evade obstacles between them and their chosen objective. ✣ A business based on making life easier for a customer rather than strewing (perceived or otherwise) obstacles in said customer's path can use the tools to achieve a success and an efficiency level undreamed-of in earlier times.

So, for example, Amazon.com, with a big investment in technology and a negligible one in bricks and mortar, was able to form alliances with a host of distributors and independent publishers to ensure near-instant access to an inventory even big-city bookstores can only dream of, delivered to customers worldwide.

On the other hand, if your business model involves being a gatekeeper between the customer and the customer's goal, or concealing information the customer wants, the Web has you in its sights.

Nowhere is this business culture clash more evident than in the ongoing saga of Pete Ellis and his brainchild Auto-By-Tel (*www.autobytel.com*), which, from its unobtrusive Irvine headquarters across Macarthur Boulevard from John Wayne Airport, is shaking the very foundations not only of the automobile business, but of other businesses, including traditional media, that depend on it for revenue. Says Melanie Webber of Auto-By-Tel's PR firm, "There's a national magazine whose name I won't mention that told us flat-out they won't do a story on Auto-By-Tel because of the power of the car dealer advertising."

Ellis started out in the car business the old-fashioned way, selling his first car at 16 and launching his first dealership at 24. Eventually he became one of the largest car dealers in the United States, with 16 dealerships and related businesses in California and Arizona. Economic shifts caused him to lose it all in the early '90s, and to ponder his next move.

Since he'd hated a good many aspects of the way he was compelled to do business as a car dealer, and had pioneered such radical concepts as haggle-free pricing at his dealerships, he knew there had to be a better way.

First launched on Prodigy in March 1995 and opening on the Web three months later, Auto-By-Tel offered customers the chance to spec the car they wanted and get a firm, but low, price from the participating dealer in their area. As the system evolved, Auto-By-Tel became ever more a one-stop shopping resource, where you could first research possible purchases, including such formerly closely-guarded info as what the dealer paid for the vehicle in question and what various consumer publications thought of the car. Having settled on the car you wanted and filled out a form with its desired attributes, you could also qualify for a loan online. Within 24-hours, you'd get a call from the local participating dealer and, if you accepted the offer, you'd be on the road after a quick and painless visit to the showroom. No piranhas. No haggling. No lingering conviction that you'd been ripped off again.

Super Bowl advertising has been very effective for Auto-By-Tel.

Still privately held, Auto-By-Tel currently operates in the US and Canada, and is in the process of opening a subsidiary in the UK. It presents a classic case study of what works in online business, and *why* it works, so with that in mind, we sat down with Ellis for a little enlightening chat.

It's pretty clear that Auto-By-Tel is one of the more shining examples of what Internet business is good for and how to do it right. In order to explain that, let's first talk about the conventional car buying process. How does it work, and why is that not necessarily wonderful in this day and age?

Conventionally, consumers go from lot to lot looking at cars and picking up information on vehicles and deciding what they potentially may want to buy.

Every time they go into a facility to look at a car, they get besieged and jumped on by car salesmen who are interested in selling them a car *today*, because a car salesman is paid a commission, and his whole life depends upon what he sells today and how much money he makes for the dealer on that car.

There is very little rationale for a salesman on a car lot to shake your hand, talk to you nicely, not talk price, not try to sell you a car, just give you some information, and go on about his business.

One reason is because there are too many dealers in the United States; this car salesman may know that if he didn't comb his hair right that morning, or say the right words to you, you're going to be down the street talking to another dealer, who could be as little as ten minutes away. So there's a lot of incentive and pressure for him to try to sell you that car right away.

What's driving the fact that there are too many dealers?

In the '50s and '60s, the manufacturers thought that they would sell more cars by having more distribution points. They figured they would maintain increased market shares, more sales, and they just kept putting dealerships on a lot of different corners.

Right at the end of World War II there were fifty-some-odd thousand dealerships in the United States; it's now down to 22,000 because they can't support that infrastructure and, they probably really need to go down to about 12–14,000. That would give them a lot more economies of scale and efficiencies. It would also ultimately affect positively the experience for consumers, because the dealers would be selling more cars in their local market areas and would drive more efficiencies through higher volumes. But it seems to have stalled in the last 15 years at about 20–24,000 dealers. Just stalled. There's been no more consolidation because the dealers have either hung on or the factories have continued to replace dealers that have gone out of business.

And thus, a continued unsavory sales process at the time you go in to buy a car.

The only one that made huge inroads to it was Saturn, because Saturn went into a marketplace and they said, "Okay, we're going to give you Oakland." But if you go to Oakland and you look for Ford, I'd bet you find three or four Ford dealers in Oakland. So, that's a problem.

So that's what creates some of the unpleasant sales practices. Even if you're just looking, you're going go through that.

Also the dealer's got to have all those salespeople to take care of you when you walk on the lot to look at a car that you may not want to buy, and then he's got to spend money to attract

Special Same-Day Service • System Specialist • Since 1990
5-Year Labor & 1-Year Parts Warranty on All Computers

MultiMedia Kit
24X EIDE CD-ROM
Yamaha 16-Bit Sound
Stereo Speakers
$99

33.6/56K
Fax/Modem
w/Voice &
Speaker Phone
$55/75

17" SVGA Monitor
Digital Control
16" Viewable Size
$329

AMD/K6-233MMX
Intel 200MMX w/TXM/B
512K L2 Cache
$199

PENTIUM® II
Intel PII 233MMX
w/440LX 512K L2 Cache
Motherboard
$379

HIGH PERFORMANCE

- Intel 430 TRX-UDMA Support Motherboard
- 512K SDRAM L2 Cache
- Processor w/Master Ball Bearing Fan
- 16MB EDO 60ns RAM
- 1.44 Floppy Drive
- 2.1GB Fast UDMA (33MB/S)
- MPEG Movie PCI 64-Bit Accelerated 3D Video w/2MB
- Panasonic 24X EIDE CD-ROM Drive
- Yamaha 16 Bit OPL3 Stereo Sound Card
- 33.6 Fax/Modem Zoltric w/Voice & Speakerphone
- Medium Tower Case
- Qtronic Win 95 Keyboard
- Microsoft Compatible Mouse & Pad
- Stereo Speakers

Pentium®-166MMX **$659**
Pentium®-200MMX **$709**
Pentium®-233MMX **$749**
AMD-200MMX **$689**
AMD-233MMX ..... **Special $699**
Monitor not Included

SUPER PERFOMANCE

- ATC-6120 MMX-PII Intel 440LX-ATX AGP UDMA (33MB/S)
- Intel Pentium® II Processor with Master CPU Cooling
- 32MB SDRAM 168 Pin (10ns) Memory
- 1.44MB Floppy Drive
- 4.3GB UDMA Fast (33MB/S)
- MPEG Movie PCI 64 Bit Accelerated 3D Video w/4MB
- 32X EIDE Toshiba CD-ROM Drive
- 32 Bit Ensonique PCI 3D Sound Card
- 56k Flex Fax/Modem Zoltrix w/Voice and Speakerphone
- ATX Deluxe Case w/Sliding Doors
- Keytronic Win 95 Enhanced
- Logitech PS/2 Mouse & Pad
- Subwoofer and Stereo Speakers w/350 Watts

Pentium® II 233MMX **$999**
Pentium® II 266MMX **$1059**
Pentium® II 300MMX **$1239**
Pentium® II 333MMX **$1389**
Monitor not Included

SPECIALS

ABIT PII LX6 Motherboard $139

Iomega Zip 100MB IDE $95

ADI Monitor SVGA .26 Microscan $359

64MB - SDRAM $129

Free Installation from any Hard Drive / Memory Purchased

ViewSonic 17" G771 $459

MOTHERBOARD w/CPU

Intel Triton 512K L2 PB SDRAM USB TX
Intel 166/200/233MHz MMX ..$189/$199/$239
AMD K6-166/200/233MHz.....$179/$189/$239
P.II-Intel 440LX-USB & CPU AGP
P.II-233/266/300 ..... $369/$399/$559
P.II-333/400 ..... Please Call
ASUS Board ..... Please Call

MEMORY

16/32MB EDO $29/59
16/32/64MB SDRAM ..... $35/$59/$129
128MB SDRAM $249

VIDEO CARDS

PCI 3D 64-Bit (MPEG) 2/4MB ..... $37/$57
Diamond Stealth 2/4MB ..... $59/$79
Stealth II 4MB SDRAM $97
ATI-In Wonderer 4MB $149
ATI-Expert Play 4/8MB ..... $139/$199
ATI Rage II 4/8MB ..... $89/$159
Matrox Millen.II AGP 4/8MB ..... $169/$239
Viper-V330 4MB AGP $145
Diamond Stealth AGP 2/4MB-3D ..... $59/$89

CPU- INTEL & AMD

Intel 166/200/233MMX ..... $109/$139/$169
AMD K6-200/233MMX ..... $119/$129
P.II- 233/266MMX ..... $259/$299
P.II- 300/333MMX ..... $419/$579
P.II- 400MMX ..... Please Call

NETWORK CARDS

NE-2000 ISA $19
SN-3200 PCI 32Bit $22
3-Com PCI110/100BT $59
Direct Jet Ex. Printer HP $299
Hub & Switch Cables ..... Please Call

HARD DRIVES

1.2/1.7GB UDMA ..... $119/$135
2.1/2.6GB UDMA ..... $139/$149
3.2/4.3GB UDMA ..... $159/$179
5.2/6.4GB UDMA ..... $199/$229
2.1/4.3GB UW-SCSI ..... $225/$289
4.5/9.1GB UW-SCSI ..... $539/$699

SCSI CONTROLLERS

SCSI-2PCI-2940 ..... $149
SCSI-UW-2940 ..... $189
RAGE CONTROLLER ..... Please Call

IOMEGA BACK-UPS

IOMEGA ZIP-100MB $95
JAZZ 1GB $229
Other ..... Please Call

MODEM & FAX

33.6/56K Flex ZOTRIC ..... $55/$75
33.6/56K X2 USR ..... $79/$129
ISDN Other ..... Please Call

CD-ROM

24/32X EIDE ..... $69/$79
24/32X SCSI CD ROM ..... $109/$129
DVD CD MASTER $279
Recordable CD ..... Please Call

MONITORS

14" SVGA .28NI $139
15" SVGA Digital .28NI $189
17" SVGA Digital .28/.26NI....$329/$339/$359

MULTIMEDIA KIT

3D YAMAHA 16 BIT&
60WATTS SPEAKER WITH:
24X CD-ROM $99
32X CD-ROM $119

TROUBLESHOOTING & UPGRADING LABOR CHARGE FOR:

System Diagnostics
Checkup/Cleanup $20
Multimedia Kit Installations $20
Fax & Modem Installation $20
Motherboard Installation $30
Video Card/Hard Drive Installation $20
Hard Drive Transfer $45
Software Installation & Setup $25/Hr
On-Site Service Charge $60/Hr
Network On-Site Service Charge $100/Hr

SAME-DAY SERVICE
WE REPAIR:
All Computer & Laser Printers

Complete Networking Service

ComTek Computer
Since 1990

DUBLIN
6602 Dublin Blvd., Dublin, CA 94568
(510) 803-1530
Fax: (510) 803-1531

E-mail:
ccomp6602@aol.com

HOURS: M-F 10-6, Sat 10-4

SANTA CLARA
5029 Stevens Creek Blvd., Santa Clara, CA 95051
(408) 249-4297
Fax: (408) 249-2370

you to his store. For every customer that walks on the lot he will spend about $100. Just for you to walk on the lot.

What's the breakdown on those costs?

Just advertising. No more cost than advertising. Just to get the warm body in the door.

A traditional dealer sells about 17–20% of the people that walk on his lot. So that means, for every car that he sells, he is spending between $350 and $400 because he's going to talk to four or five people before he sells one. So when you come on the lot, his salesmen are compelled to try and sell you, because there's a cost.

The other thing is that when he does sell the car, he's got a $350–$400 cost per car sold, but he's got an infrastructure of salesmen in play that put you through systems.

The model's now starting to really be challenged, but dealers found out a long time ago that if they put the customer through systems, somehow their closing ratio is improved and their gross averages improved. Thus, you talk to three to five people when you're looking at completing a transaction: You talk to a salesman; if he doesn't sell you a car, he may turn you to another salesman; you may end up going through what they call a closer who then will close the deal; then you might talk to a finance manager who writes a contract and tries to sell you financing or sell you after-market product.

All those people add to the cost. Dealers moved into that inefficient model over the years because they thought that was actually going to be more efficient for them.

To sell a car, marketing costs 300 to 400 bucks, based upon some of the numbers we look at from NADA and national numbers. I know my numbers were about $500 a car as a dealer. And the personnel cost to sell the car with those three to five people is about $800. This process brings the cost to sell you a new car to somewhere around $1200.

Which, of course, is passed on to the customer.

Oh, absolutely.

So, basically, everybody who actually buys a car is paying for a lot of tire-kickers, among other things.

Well, they're paying for what's called an outmoded distribution model. Its time is come.

So now the Internet comes along, and instead of you going from dealership to dealership, you do your research online. You learn pricing, cost...

In the traditional model they don't really like it if you have done any research. The more ignorant you are, the better they like you.

The more money they'll make. You know, ignorance is bliss for auto dealers.

The "corporate culture" at Auto-by-Tel: The walls in the Irvine office are adorned with tropical murals and employees are encouraged to wear Hawaiian shirts.

If you walk in waving *Consumer Reports*, they give you the hairy eyeball.

But I'll tell you what—you walk in bringing in *Consumer Reports*, they'll talk to you differently.

And essentially that's what Auto-By-Tel has done. We have customers now that go through our service, and they'll walk in to another dealer somewhere and say, "You know, I went through Auto-By-Tel..." and they get, "Oh, you're one of *those*." Then they go talk to a manager, and they treat you differently. They treat you at a higher plane, because now they know that you're educated.

It kind of upsets me, because we've kind of trained dealers that aren't Auto-By-Tel dealers how to do a better job, but that's part of being where we are.

Here's how the model got put together by this company and through my thought processes.

I used to have companies that would come to me and say, "We're going to send you a lot of business, five or ten deals a month." Maybe some broker or a credit union program or something, you know.

If that person came to me and said, "We want you to work this way when you talk to the customer," and, say, it was four or five cars a month, I probably wouldn't pay much attention to it. It didn't do anything to my bottom line. It didn't do anything for my business. And I'd say, "Yeah, yeah, I'll do it." And then not do it.

I knew if we were going to make a difference in this business, what we had to do is send huge incremental volume to a dealer as the carrot. The stick was, "You need to call the customer up within 24 hours"—we had it at 48, but we cinched it up—"and give them a price over the phone." If they give a lousy price to a customer that's been on the Internet and been educated, they will not sell a car.

So they've got to give a competitive price up front or they will lose a customer; if they're not professional they'll also lose a customer. We train our dealers. We have 21 training seminars a month across the US training dealers on how to take care of the Internet customer and how to change their financial model.

Believe me, we had a lot of trouble in the early days. I had one dealer call me up and say, "You're not going to tell *me* how to sell cars." I said, "You're right. You're not going to be an Auto-By-Tel dealer. That's it."

In most cases they'll go: "Well, I didn't mean *that*. But I don't want you telling me how I'm going to go sell cars." I say, "We're not telling you how to sell cars. What we're doing is telling you what the customer wants. And if you can deliver what the customer wants, you can be part of Auto-By-Tel, and if you can't deliver what the customer wants, then you need to go away."

By the fact that there's 22,000 dealers in the US, and we're going to work with approximately 3,000, we have consolidated the marketplace to a manageable number where we act as a big funnel. We take all these deals and we send them to a dealer. We say, "Mr. Dealer, you're going to get all the people that come out of this funnel. You got to call 'em. You got to treat 'em right. You got to be professional. You got to give them a price over the phone. And you've got to be competitive."

And the funnel is governed by their physical location and what line of cars they sell?

Exactly.

We survey all the customers, and we get reports back. We either do post-mortems, where we actually call customers when we suspect something's wrong, or we have electronic surveys. If we find a problem, we put the dealer in training; if we don't see an improvement, we take that funnel and we move it to another dealer.

And the dealers? I tell you what. They pay attention. They take care of it. Because when a guy comes to me and says, "We're going to send you 100 deals a month," what am I going to do? And that's why it works real well.

We've had Toyota say to us, "You know, you do what we can't do. We can't do what you do." The factories cannot do what we do because we are not involved in the same relationship with a dealer, as a distributor or as a manufacturer, and we

The Right Price...The Right Advice

HEWLETT PACKARD VECTRA VL5

- Intel Pentium® 200MMX CPU
- 32MB RAM up to 192MB
- 2.5GB Hard Drive
- 2MB Video Card
- 1.44 Floppy Drive
- 8X CD
- MS Windows 95 & MS Keyboard
- Desktop Case

Monitor Not Included
Model #D4596B

$999

COMPAQ DESKPRO 4000N/200X DT

- Intel Pentium® 200MHz CPU
- 32MB RAM up to 256MB
- 1.6GB EIDE Hard Drive
- 2MB S3 Video Card
- 1.44 Floppy Drive
- Mini-Tower Case
- Compaq Keyboard & Mouse
- MS Windows NT Workstation 4.0

Monitor Not Included
Model 308320-002

$1037

A&A SCREAMER

- Pentium® 200MHz MMX CPU
- 32MB EDO RAM
- 2.5GB EIDE Hard Drive
- 2MB MPEG 64-Bit Video Card
- 1.44 Floppy Drive
- 16-Bit 3D Software Wavetable Sound Card
- MS Windows 95 CD Version
- Mini-Tower Case
- Multimedia Speakers
- 1-Year On-Site Service

Monitor Not Included
MPC-MMX 200MTX/2532M

$CALL

TOSHIBA

TECRA

520CDT, P166MMX, 32/2GB, TFT, 10X CD . . . **$2399**
5300CDT, P166MMX, 32/3.8GB TFT, 10X. . . . . **CALL**
7300CDT, P150MMX, 16/2.1GB, 12.1" TFT, 10X **$1499**
740CDT, P166MMX, 16/3GB, TFT, 10X CD . . . **$2499**
750CDT, P233MMX, 32/4GB, TFT, 20X CD . . . . **CALL**
750DVD, P233MMX, 64/5.1 TFT, 20X CD. . . . **$5299**
730DVD, P266, 64/5.1 TFT, 24X CD . . . . . **CALL**

SATELLITE PRO

470CDT, P200MMX, 32/2.1GB, TFT, 10X **$2795**
460CDS, P166MMX, 32/4GB, TFT . . . . . **CALL**
480CDT, P233MMX, 32/3.8GB, TFT, 10X **$3299**

PROTEGE

320CT, P266MMX, 32/4GB, TFT. . . . . **CALL**
660CDT, P150MMX, 16/1.35GB, 10X. **$2099**

LIBRETTO

100CT, P166, 32/2GB, 7.1 TFT **$2499**

IBM®

380 SERIES

TP 380ED, P166MMX, 16/30GB, TFT 20X . . . . **CALL**
TP 380ED, P166MMX, 16/2.1GB, FRSTN 20X . **CALL**

560 SERIES

TP 560, P133, 8/2.1GB TFT . . . . . **CALL**
TP 560X, P200MMX, 32/2.1GD Dscan **$2349**
TP 560X, P233MMX, 32/4.0GB **$3799**

700 SERIES

TP 760XD, P166MMX, 32/3GB, TFT 8X CD . . **$4512**
TP 760XL, P166MMX, 16/2.1GB, TFT **$2599**
TP 770, P233MMX, 32/4.0GB, TFT 20X CD . . . **CALL**

COMPAQ

ARMADA

1550 DMT, P133 16/1.4GB 10X **$1699**
1580 DMT, P150MMX 16/2.1GB 10X. . . . . **CALL**
7730 MT, P166MMX 32/2.1GB TFT . . . . . **CALL**
7770 DMT, P233MMX 32/3.0GB TFT **$3743**
7750 MT, P166MMX 32/4GB TFT. . . . . **CALL**
7790 DMT, P233MMX 16/1.4GB TFT **$4599**

MONITORS

Impression 17" w/Speakers **$329**
Adi MicroScan 5P 17" **$409**
Priceton 15" SVGA **$229**
Sony 300SF 20" SVGA **$1059**
Sony GDM 200PS 17" SVGA **$669**
Sony GDM 400PS 19" SVGA **$829**

HEWLETT PACKARD

Authorized Reseller

HP DeskJet 670C Printer **$199**
•Great performance at a low price •1 color cartridge included

HP DeskJet 890CXi Printer. **$299**
•Fast performance delivers increased productivity
•Accepts a wider range of media for a variety of output needs
•Plug'n'Play installation for both PC and Mac

HP DeskJet 692C Printer **$275**
•600 dpi resolution
•3-year warranty offers the longest protection in the industry

HP LaserJet 6Lxi Printer **$379**
•4ppm, 24MHz Motorola 68030 processor
•4,000 Monthly duty cycle

HP LaserJet 4000 Printer **$1059**
•1200x1200 dpi resolution •17ppm 4MB

HP LaserJet 6Pxi Printer **$729**
•600 dpi resolution •Plug and play for PC

HP LaserJet 4000N Printer **$1379**
•1200x1200 dpi resolution •17ppm, 8MB, Network Ready

HP LaserJet 5Si/5SiMX Printer **$2299/2899**
•24ppm print speed and 100,000-page monthly duty cycle
•Increased user controls and improved network management

apple

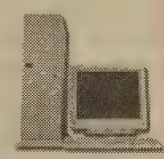
Power Mac 8620/300 32/4GB . . . **$2899**
24X CD - M6092LLA, C#92779

Power Mac 9600/350 64/4GB . . . **$4199**
24X CD w/Zip - M5906LLA, C#94035

Power Mac G3/233 32/4GB **$1899**
24X CD M6141LLA, C#91792

Power Mac G3/233 32/6GB . . . . . **$CALL**

COMPAQ



Deskpro 2000 P166 MMX **$1389**
M7 32/3.2GB, 16X CD W95 - 278750-002 / 91226

Deskpro 400 P166 MMX. **$1359**
32/3.2GB W95 - 270600-007 / 91242

Deskpro 6000 MT P2/266 . . . . . **$3199**
64MB/4.3GB, 24X CD-NT 4.0 - 270740-000 / 92932

Proliant 1200 P233 32MB . . . . . **CALL**
Model 1 - 292910-001/92577

Proliant 1600 P266 64MB. **$3605**
Model 1-292930-001 / 93505

Proliant 500, 700 Series . . . . . **CALL**

HEWLETT PACKARD VECTRA VL

- Intel Pentium® II
- 32MB RAM
- 4.0GB Hard Drive
- 2MB Matrox Millenium Card
- 24X CD
- 1.44 Floppy Drive
- MS Windows NT 4.0

Monitor Not Included
Model D5044N

$1799

COMPAQ DESKPRO 4000S/266MMT

- Intel Pentium® II 266MHz CPU
- 32MB RAM
- 3.2GB EIDE Hard Drive
- Matrox MGA 2MB Video Card
- 24X CD-ROM Drive
- 16-Bit Sound Card
- 1.44 Floppy Drive
- Mini-Tower Case
- Compaq Keyboard & Mouse
- MS Windows NT Workstation 4.0

Monitor Not Included
Model 270800-003

CALL

NETWORKING SERVICES

- ***Networking Design & Consuling***
- ***Support (TCP/IP)***
- ***Multiple OS •Cabling***
- ***Internet Solutions***
- ***www. FTP Mail Servers***
- ***Firewalls***
- ***Web Page Design***
- ***Rackmount Systems***
- ***Troubleshooting***

DEALER • CLEARENCE • SPECIALS

HP Accesories

HP 51625A/15 ....$15, 516404 ....$10, 51644C ..$25, 516444 ....$25
C2291B.....$70, C2071A....$150, C2085B $52, C2525B ..$300
C2801A.....$700, C3003A..$30, C3004A ..$50, C3005A ..$50
C3607A.....$25, C3103A....$25, C3104A ..$25, C3162A ..$75
C3280A.....$25, C3543A....$275, C3820A $400, C3921A $175
C3926A.....$50, C4533A....$10, C5300A ..$600, C205A ..$400
F1074A.....$115, J2382A ..$175

IBM Accesories

OYH8095 ....$250, 06H748 ....$80, 12J2456 .....$50, 13H6714 .....$30
1969010 .....$400, 3595001 ..$265, 3574002 ....$500, 39H7405 ....$147
41H9719.....$50, 41H9722 ....$50, 46H4209 .....$155, 46H5994 ....$30

TECHNOLOGY, INC.

FREMONT
510.226.8650
Fax 510.226.8652
45277 Fremont Blvd. #11

SAN FRANCISCO
415.782.0000
Fax 415.782.0011
350 Sansome Street, Suite #M10

Since 1992!

Authorized Service Center for HP, Compaq, & Toshiba

apple HEWLETT PACKARD OKIDATA COMPAQ TOSHIBA EPSON

Prices reflect cash discount.
Prices & availability subject to change without notice.
Not responsible for typographical errors. All logos are registered trademarks of their respective companies.

DISCOVER AMERICAN EXPRESS ATM VISA MasterCard

can say, "Look, we have customer service standards, and you've got to adhere to them or we can pull with 30 days notice." And we do do that.

How is it, in your opinion, that this really customer-hostile model has survived as long as it has?

The US has probably the worst formula for distribution. The manufacturer's trying to control the distribution channel, and they're after sales. I don't care what anybody says to you, the manufacturer can say: "Look, I'm into air bags; I'm into safety; I'm into cars lasting long; I'm into 100,000 mile tuneups." They're into every one of those things because over the years this is what customers have said will make me buy your car.

They're not into developing better product because they have some altruistic motive. Their motive is profit.

Right. If customers wanted Pinto Flambé, they would get Pinto Flambé.

Exactly. So they're driven by what the public wants. But in the meantime they want to control what you think and what you want.

And they go to great pains to keep you from finding out all kinds of stuff.

Well, see, they don't want you to have the information we give out there to customers in terms of competitive analysis. It's not favorable to a lot of companies, and it's not favorable to dealers, but the reality is that our customer is a retail buyer.

Adding to the problem is that in the US, the dealers over the years have contributed quite heavily to local state legislators. With contributions, they convinced legislators that they had made an investment in bricks and mortar and in inventory and in people in that Congressman's or Assembly person's district; and that because they had made that investment, it is a detriment if there's some other type of distribution model that can be put together for less money.

A form of pork-barrel legislation.

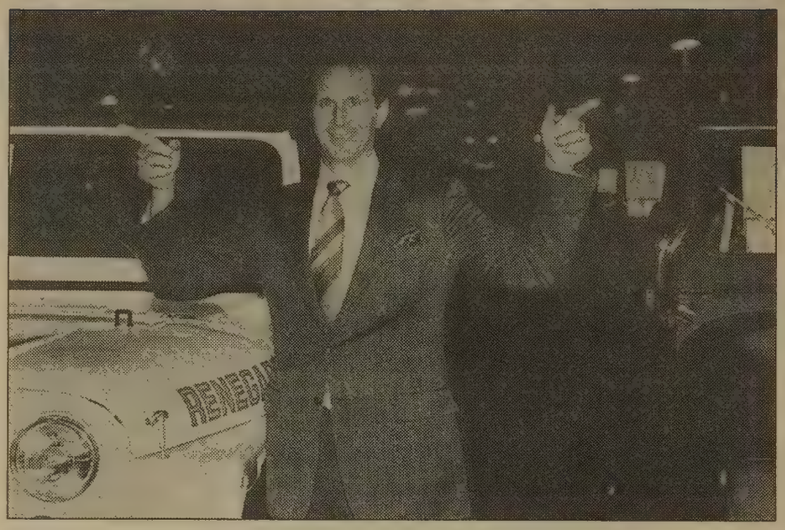
Yes. It's a beautiful one.

So now, a lot of the state legislatures have enacted franchise laws for dealers that give them tremendous protection, where the factory has not as much control over the process. If you're a bad dealer, I mean, it could take them five years to get you out of business.

So the franchise dealers are protected; the manufacturer has put too many dealerships around; the dealer's trying to survive, so he puts in these competitive sales practices that are anti-consumer, but he didn't know that when he put them in.

A whole industry was spawned around a lousy model. And it was unable to be shaken down.

Now the Internet comes along, and it allows consumers to be educated. It allows them to inexpensively be routed through dealers. It changes the distribution model, and not without a lot of fear from car dealers and from the manufacturers. GM went up with GM Buy Power, Chrysler's trying to do Chrysler-By-Tel—I mean, they tell us. Toyota trying to do Toyota-By-Tel.



Ellis as he appeared in a 1985 TV commercial for his chain of car dealerships.

What they don't have is the ability to change what happens at the dealership level. We can. If there are three Ford dealers in Oakland franchises, Ford can't consolidate the people who come through the Internet and give those dealers incremental sales. All they're doing is just taking the sand pile and moving it around. They haven't done anything more for the dealer, so they haven't done anything more to create efficiencies for the consumer. Which means they will fail—that model.

They've got another gateway into the store, but that's about it.

Anderson Consulting came through here and they said they were impressed with our concept. They said: "The consumer value proposition is fundamentally sound. The service adds value to the consumers, low pressure, integrity, objectivity, speed, informative, et cetera, and the process reduces the dealer's selling cost, which enables competitively managed prices for ABT products and services."

Our surveys show us that the customers are essentially paying the dealer about half the margins they normally do. Here's the funny part of that: The dealer makes more money. [*laughs*]

Explain how that works.

Let's say that a dealer sells you a new car for $1,600–1,700 gross profit. He will have attached to that $7–800 worth of personnel costs, $3–400 worth of marketing costs, $50–100 worth of floor plan, which inventory costs. And then the fellow to wash the cars and the maintenance and stuff like that might be another $25–100 a car per month. And next thing is you're looking at a cost to sell a new car at about $1,550 or so for all expenses. The dealer sells you the car for $1,600 or $1,650, he makes $100 on the car.

Is that number real? NADA said last year that the dealers in the United States made $77 profit per new car sold. So those numbers are right on. We all know that in the car business. I knew it. I saw it. Most dealers lose money on new cars.

The average car salesman in the US sells nine cars a month. And in the Auto-By-Tel process, one person can sell 25 to 35 cars a month. The reason they can do that is because you're a highly qualified, educated, ready-to-buy customer, coming down through the Internet into a dealer, and he can call you up, give you the numbers, and you can be in and out of a dealership in an hour. It's not a half-a-day deal.

Plus, he doesn't have to have five people taking care of you. If the dealer adheres to our financial model, where they pay the person a salary and a stipend per car, he comes up with a cost—including personnel and marketing—at under 300 bucks a car.

So it's a huge savings. Now the dealer that sold you the car for $1,600 gross profit and, because he had all those other costs added to it, made $50 or $100 net, can afford to sell you a car for half his margins, or even less, and he might make, net, $2–3–4–500. So he sold you the car for less

It's a win-win.

It's a win-win. And that's the same thing that Anderson said. They said the business [*reads*] "creates an attractive profit opportunity for dealers. That it creates incremental sales for a restricted number of market area for the dealers; it provides the ability to maintain or improve dealer margins by substituting ABT technology for dealer labor costs; and that it creates enhanced opportunities for an expanding array of consumer-oriented services such as finance and insurances where we can drop the cost for the customer."

We did that on financing. We went to Chase Bank and we're Chase's biggest customer right now. We said, "Look, we're going to take all of

continued on page 106

440BX AGP CHIPSET

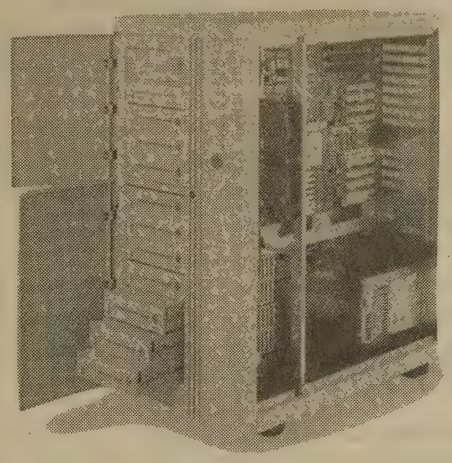
BEST PERFORMANCE FOR YOUR SERVERS & WORKSTATIONS

SUPPORTED BY SUPERMICRO

NT WORKSTATION WINDOWS NT SERVER

P-II 333MHz
Workstation Dual CPU/SCSI UW
Intel 440LX AGP Chipset w/512K Cache
64MB DIMM/10ns SDRAM Memory
5.2GB Ultra DMA IDE Hard Disk Drive
Super AGP 128-Bit 3D Video Card/4MB
24X CD-ROM EIDE & 1.44MB Floppy
Sound Blaster AWE 64 Sound Card
Hi-Powered Stereo Speaker Systems
56K X2 US Robotics PnP Fax Modem
104-Key Keyboard, Mouse, and Pad
Mid Tower Case with Power Supply
Microsoft Windows 95 or NT 4.0 WS
Pentium® II 333MHz x 1 . . . . . $1690
Pentium® II 300MHz x 1 . . . . . $1570
Quality Components

Pentium® II 333Mhz **$1390**



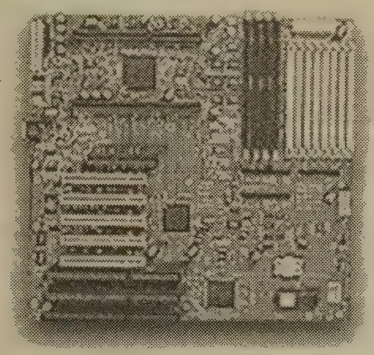
DUAL PROCESSOR • THERMAL CONTROL
FAULT-TOLERANT REDUNDANCY

P-II 450 MHz
(Deschutes) Super NT
Server Dual CPU/SCSI UW
Intel 440BX AGP Chipset w/512K Cache
128MB Registered SDRAM Memory
5.2GB Ultra DMA IDE Hard Disk Drive
Super AGP 128-Bit 3D Video Card/4MB
24X CD-ROM EIDE & 1.44MB Floppy
Sound Blaster AWE 64 Sound Card
Hi-Powered Stereo Speaker Systems
56K X2 US Robotics PnP Fax Modem
104-Key Keyboard, Mouse, and Pad
Mid Tower Case with Power Supply
Microsoft Windows 95 or NT 4.0 WS
Deschutes 400MHz x 1 . . . . . $2840
Deschutes 350MHz x 1 . . . . . $2610

Deschutes 400 MHz x 2 **$3660**

P-II 333MHZ CAD STATION
Intel 440LX AGP Chipset w/512K Cache
128MB DIMM/10ns SDRAM Memory
9.0GB Ultra Wide SCSI Hard Disk Drive
Super AGP 120-Bit 3D Video Card /8MB
24X CD-ROM EIDE & 1.44MB Floppy
Sound Blaster AWE 64 Sound Card
Hi-Powered Stereo Speaker Systems
56K X2 US Robotics PnP Fax Modem
104-Key Keyboard, Mouse, and Pad
13 Bay Full Tower Case with 300W
Microsoft Windows 95 or NT 4.0 WS
Pentium® II 300/333MHz x 1 . . . . . $2700/2820
Dual Pentium® II 300MHz x 2 . . . . . $3090

CUSTOM CONFIGURATION



SUPERMICRO®

P-II 333MHZ FILE SERVER
Intel 440FX Chipset w/512K Cache
128MB EDO ECC RAM (up to 1GB)
24X CD-ROM IDE & 1.44MB Floppy
9.0GB Ultra Wide SCSI Hard Drive
Adaptec 2940UW SCSI Controller
2MB PCI Super VGA Graphic Card
3COM/3C905 TX 10/100 PCI Card
Enhanced 104-Key Keyboard Serial
MS Compatible Mouse and Pad
Full Tower w/Dual Redundant 300W
MS Windows NT 4.0 Server/5 Client
Pentium® II300/333MHz x 1. . . . . $2440/2560
Dual Pentium® II 300MHz x 2 . . . . . $2820

FREE TECHNICAL SUPPORT

BRAND NAME COMPONENTS

SUPERMICRO MOTHERBOARDS

P6 SBA PII BX 4PC2/32sa/1AGP/A7X	$175
P6 SBA PII BX 4PC2/32S2 (7895)/A7X	$298
P6 SBA PII BX Dual/4PC2/A7	$315
P6 SBA PII BX Dual/4PC2/SCS2 (7695)/A7X	$425
P6 DLH	$645
P6 DLS	$315
P6 DLE	$240
P6 DLF	$275
P6 SLA	$129
P5 MMA-98	$109
P5 MMS-98	$108
P5 MMS-2	$100

ASUS MOTHERBOARD

P2B PII BX	$188
P2B BLS PI BX/SCS2 (7895)/LAN	$333
P2B L97 PII X	$134
P2B L97-5	$220
P2B L97-DS	$340
TX P4	$105
SP97-V	$8SP97-XV$88

MEMORY

PC-100 64MB	$CALL
PC-100 128MB	$CALL

MONITORS

14" Komodo	$114
15" Komodo	$13
17" Komodo	$268
17.25 Digiview	$475

FAX/MODEMS

US Robotics X256K, Int	$108
V.90 K56 Flex	Call
Super Modem 112K	Call

Best Service, Best Quality, and Best Value Since 1988

Golden Valley Systems

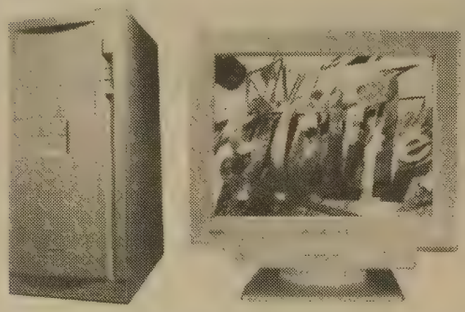
Golden Valley Systems Inc., 1750 Houret Court, Milpitas, CA 95035
Tel: 408-934-5898 Fax: 408-934-5896

LAITRON

Since 1991

"Your Total Computer Solution"

Laitron Computer now offers our customers a 2 year warranty on parts and labor on all computer systems. In order to keep our customers up and running, we will also be offering our customers a 24 hour swap on components** that become defective within the first year of the warranty period.



GRAND OPENING!!

WE NOW HAVE A RETAIL STORE AT OUR CORPORATE HEADQUARTERS IN FREMONT!! WE HAVE THOUSANDS OF ITEMS IN STOCK AT THE LOWEST PRICES. COME MEET OUR FRIENDLY AND KNOWLEDGABLE SALES STAFF. WE ARE RIGHT OFF THE 880 FREEWAY ON AUTOMALL PKWY.

5005 BRANDIN COURT, FREMONT, CA. 94538 Phone: (510) 657-3400

Intel 400MHz Performance System 100MHz Bus

- -Asus P2B BX Chipset P-II M/B
- -Intel Pentium II **400** Mhz Processor
- -64MB SDRAM Memory 8ns
- -Western Digital 6.4GB UDMA H/D
- -Toshiba 32X IDE CD-ROM
- -Supra Max 56K V.90 Fax/Modem
- -Matrox Millenium II 4MB AGP
- -Soundblaster 16 bit audio
- -Keytronic PS/2 Keyboard
- -Microsoft Intellimouse PS/2
- -Yamaha M7 Speakers
- -1.44 Floppy Drive
- -Midsize ATX Case
- -Windows 95

$1999

UPGRADE TO 450MHz.....$199
ADD 17" innov8 .27 289
UPGRADE TO AWE 64.....$29
UPGRADE TO 128MB 8ns....139

FREE UPGRADE TO MS WINDOWS 98 WITH ANY PENTIUM II COMPUTER PURCHASE!!**

Microsoft® SOLUTION PROVIDER

AMD K6-233 MMX W/ SCANNER

- -Asus SP-97V M/B
- -AMD K6-233 MHz w/MMX
- -32 MB EDO Simm 72P
- -Western Digital 2.1GB HD
- -Integrated 4MB Video
- -16 bit audio,speakers
- -24X IDE CD-Rom
- -56K Fax/Modem
- **-Internal Photo Scanner**
- -1.44 Floppy, Keyboard
- -Mini Tower Case, Mouse
- -Windows 95 CD

intel inside pentium

$749

UPGRADE TO 64MB.....$45
UPGRADE 4.3GB HD.....45
ADD A innov8 15"... 159

OFFICE WIZARD

- -Elitegroup P-II 440LX M/B
- -Intel Pentium II 233 MHz
- **-32 MB** SDRAM 10ns
- **-WD 3.2 GB UDMA**
- -Dmond 3D 4000 4MB AGP
- -Sound Blaster 16 bit
- -24X CD-Rom
- **-Supra Max 56K V.90 int**
- -1.44 Floppy Drive
- -Speakers, 3B Mouse
- -Keyboard, Med. Case
- -Windows 95 CD

$999

UPGRADE TO 96MB.....$49
UPGR. TO 266/333.....149/399
UPGRADE TO AWE 64.....45

AGP LIGHTNING w/ Video Camera

- -Asus P2L97 440LX M/B
- -Intel Pentium II 266 MHz
- -64 MB SDRAM 10ns
- -Western Digital 6.4GB UD
- -Diamond Viper AGP 4MB
- -Toshiba **32X** CD-Rom
- -Xirlink Video Camera
- **-Supra Max 56K V.90 int**
- -Soundblaster Awe 64
- -Speakers, MS Mouse
- -Keyboard, Floppy, MidCase
- -Windows 95 CD

$1449

UPGRADE TO 300MHz.....$199
UPGRADE TO 333MHz.....329
UPGRADE TO Millen II 8MB..85

TOSHIBA EQUIUM 6200D

- -Pentium Pro Motherboard
- -Intel Pentium Pro 200 w/256K
- -32MB EDO DRAM
- -3.0 GB EIDE Hard Drive
- -2MB EDO 3D Video
- -Intel Ether Express 10/100
- -12X CD-ROM
- -Crystal Audio 16 Bit audio
- -PS/2 Mouse, Keyboard
- -Floppy, Desktop Case
- -MS NT 4.0 WS Pre-installed
- -3 Year Warranty
- -1st year Onsite Warranty

$849

ADD A innov8 17" .27.....$289
ADD A Sony 17" 200ES.....$559
ADD A iiyama 19" .26.....$769

ATM POs

Laitron Computer will swap part with comparable components that match the current market price of the defective product. 24 Hour swap applies only only to Motherboard, Hard drive, Video card, Sound Card, Ethernet Card, Fax/Modem, CD-Rom Does not include Special Order items, clearance merchandise, monitors, tape backup drives, CD-Recorders, Speakers.

**Offer good on purchases made after May 1,1998 on P-II systems over $1000

SAN JOSE

780 Montague Expwy.
San Jose, CA. 95131
X-street: O'Toole Ave.
(P): 408-321-9488
(F): 408-321-9353
Hours: M-F 9-6 Sat. 10-4

PLEASANT HILL

508 Contra Costa Ave
Pleasant Hill, CA. 94523
X-street: 2nd Ave. South
(P): 510-798-7888
(F): 510-798-8396
Hours: M-F 10-7 Sat-Sun 10-4

MILLBRAE

39 EL CAMINO REAL
Millbrae, CA. 94030
X-street: Millbrae Ave.
(P): 650-652-0888
(F): 650-652-0899
Hours: M-F 9:30-6:30 Sat. 10-4

PLEASANTON

COMING SOON!!!
Pleasanton, CA. 94588
X-street: Hopyard Rd.
(P): 510-XXX-XXXX
(F): 510-XXX-XXXX

Open 7 Days a Week

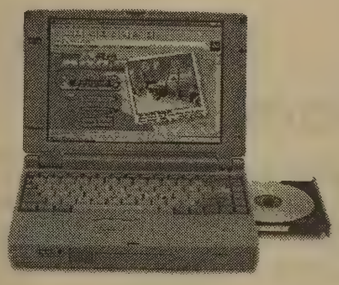
LAITRON http://www.laitron.com

LAITRON

Since 1991

"Your Total Computer Solution"

Laitron Computer now offers our customers a 2 year warranty on parts and labor on all computer systems. In order to keep our customers up and running, we will also be offering our customers a 24 hour swap on components that become defective within the first year of the warranty period.**



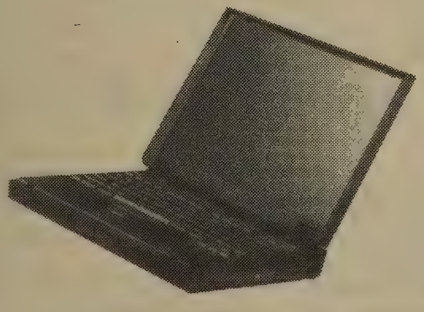
TOSHIBA

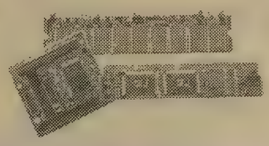
Libretto 50CT 75, 16MB, 772mb, 6.1 TFT	$969
Libretto 70CT 120, 16MB, 1,5gb, 6.1 TFT	1429
Libretto 100CT 166MMX, 32MB, 2.1mb, 7.1	2499
Satellite Pro 440CDX 133MMX,1.3gb16mb,dstn	1339
Satellite Pro 440CDT 133MMX,1.3,16mb,TFT	1899
Satellite Pro 460CDX 166MMX,2gb,32mb,dstn	1699
Satellite Pro 460CDT 166MMX,2gb,32mb,TFT	2749
Satellite Pro 470CDT 200MMX,2gb,16mb,TFT	2849
Satellite Pro 480CDT 233MMX,3.8gb,16mb,TFT	3199
Satellite Pro 490CDT P-II 233,4gb,32mb,TFT	3499
Satellite Pro 490XCDT P-II 266,2gb,32mb,TFT	3899
Portege 660CDT 150MMX,1.35gb,16mb,TFT	2029
Portege 320CT 266MMX,3.8gb,32mb,TFT	3499
Tecra 550CDT 266MMX,3.8gb,32mb,20X,TFT	1749
Tecra 740CDT 166MMX,2.0gb,16mb,10X,TFT	2749
Tecra 750CDT 233MMX,4.7gb,32mb,20X,TFT	4899
Tecra 750CDM 233MMX,4.7gb,32mb,20X,TFT	4799
Tecra 750DVD 233MMX,4.7gb,64mb,DVD,TFT	5199
Tecra 780CDM P-II 266,8.1gb,64mb,20X,TFT	5499
Tecra 780DVD P-II 266,8.1gb,64mb,DVD,TFT	5899

ASUS

ASUS

P6300 233MMX,32mb,2gb,20X,13.3 TFT	$2699





NOTEBOOK MEMORY

Memory for Toshiba

8MB for 2400,3400,3600	$39
8MB for 400,410,420,430.	39
8MB for 4400	79
8MB for 500,650,750,305,315	39
8MB for 700.	39
8MB for Libretto 50CT	39
16MB for 500,750.	69
16MB for 610,400,410,420	68
16MB for 660,300,305,480	59
16MB for 700.	79
16MB for Libretto 50,70	85
32MB for 500.520,220,440,460	109
32MB for 300	119
32MB for 400,610,720.	109
32MB for 750,660,650	119
48MB for 500.300,440,400	179
64MB for 500,650,660,550,750	199
64MB for 710,720,730,740.	189
64MB for 750,660,650	119
128MB for 440,445,460,480	379
128MB for 500,510,520, 220.	379
128MB for 710,720,730,740	339

Memory for Compaq

16MB for 1500 series (all)	$69
16MB for 7700 series (all), 1130	69
16MB for 4100 series (all)	85
32MB for 1500 series (all)	119
32MB for 7700 series (all), 1130.	119
32MB for 4100 series (all)	139
64MB for 1500 series (all).	235
64MB for 7700 series (all)	235
64MB for 4100 series (all)	259

Memory for IBM

16MB for 345,355,360,370	$125
16MB for 750,755 (486)	95
16MB for 755 Pentium	109
16MB for 760,560,380,365X	59
32MB for TP 755	149
32MB for TP 760	159
32MB for 760,580,380,365X	125
64MB for 380,560,760	199
64MB for 770 SDRAM	229
128MB for 770 SDRAM	579
64MB for 770 SDRAM	229

CHEMBOOK

CHEM USA

"Build To Order Notebooks" The Notebook Company

(All Chembooks include Win 95,AC adap,battery)

2600 166MMX,16mb,14X,12.1 DSTN.	1099
ADD 2.1GB/3.0GB/4.0GB	199/275/439
ADD 16MB/32MB/64MB	59/99/199
ADD 33.6K/56K Fax/ModemPCMCIA	59/89
ADD MS Office Small Biz Edition	199
2700 233MMX,32mb,20X,4mb Vid,14.2 TFT.	2079
ADD 3.0GB/4.0GB/5.0GB	275/439/579
ADD 16MB/32MB/64MB	59/99/189
ADD 33.6K/56K Fax/ModemPCMCIA	59/89
UPGRADE to Windows NT	99
3300 166MMX,32mb,20X,1.44,12.1 TFT	1499
ADD 2.1GB/3.0GB/4.0GB	199/275/439
ADD 32MB/64MB	95/179
UPGRADE to 200MMX/233MMX	29/89
ADD 33.6K/56K Fax/ModemPCMCIA	59/89
ADD Ethernet Card PCMCIA	65
ADD Carrying Case	19
6000 IMM 233MMX,32mb,20X,13.3 XGA	2399
ADD 2.0GB/3.0GB/4.0GB	199/275/439
ADD 32MB/64MB/128MB	125/249/469
ADD Port Replicator	189
ADD Lithium Ion Battery	199
7000 233MMX,32mb,20X,4mb,15.1 XGA	2339
ADD 3.0GB/4.0GB/5.0GB	275/439/579
UPGRADE to Tillamook 266MHz	129
UPGRADE to IMM 233/266 MHz	59/159
ADD 33.6K/56K Fax/Modem PCMCIA	59/89
9750 166MMX,16mb,20X,13.3 TFT, Lith.	1799
ADD 3.0GB/4.0GB/5.0GB	275/439/579
ADD 16MB/32MB/64MB	59/99/199
ADD 33.6K/56K Fax/ModemPCMCIA	59/89
ADD MS Office Small Biz Edition	199

COMPAQ

COMPAQ

Armada 4160T 166MMX,16mb,2.1gb,12.1 TFT	$2469
Armada 7360D 200MMX,16mb,3.0gb,20X,TFT	3425
Armada 7770D 233MMX,32mb,3.0gb,20X,TFT	3679
Armada 7790D 233MMX,32mb,5.0gb,20X,13.3	4499
Armada 7792D 266MMX,32mb,5.0gb,20X,13.3	5459
Armada 7800D P-II 266,64mb,5.0gb,13.3 CTFT	5459
Tower Stand for Armada 7700 Series	109

3COM

3Com

PalmPilot Organizer	$199
PalmPilot Organizer Professional	289

BERKELEY
2113 University Ave.
Berkeley, CA. 94704
X-street: Shattuck
(P): 510-647-1777
(F): 510-647-1333
Hours: M-F 10-7 S-S 10-4
Now Open 7 Days (Berk only)

HAYWARD
24901 Santa Clara St. SteB3
Hayward, CA. 94544
X-street: Jackson
(P): 510-266-0606
(F): 510-266-0522
Hours: M-F 9-6 Sat. 10-4

CORPORATE HQ
5005 Brandin Court
Fremont, CA. 94538
X-street: Christy St.
(P): 510-657-3400
(F): 510-661-2012
Hours: M-F 9-6 Sat. Closed

PLEASANTON
COMING SOON!!!
Pleasanton, CA. 94588
X-street: Hopyard Rd.
(P): 510-XXX-XXXX
(F): 510-XXX-XXXX

LAITRON http://www.laitron.com ATM POs

LAITRON

Since 1991

"Your Total Computer Solution"

LAITRON

http://www.laitron.com

ATM

POs

AMERICAN EXPRESS

MasterCard

DISCOVER

VISA

COME SEE OUR NEW RETAIL STORE IN FREMONT, AND TAKE ADVANTAGE OF THE SPECIALS WE ARE HAVING TO CELEBRATE OUR GRAND OPENING!! (Fremont Store Only)

1) Western Digital 3.2GB UDMA Hard Drive $135 (Latest Drive)
2) Initio Ultra SCSI Cont. Card $79 (Made by Adaptec Engineers)
3) Artec 3 Button Mouse $4 (Also available in PS/2)

NETWORKING

BAY NETWORKS

	$
Netgear FA310TX 10/100 NIC	29
Netgear EN 104/108/308/516 hubs	.59/79/99/199
Netgear FE104/108 100Mbps 4/8 port hub	.159/319
Netgear FE508 Stackable 100 8 port, RJ-45	.399
Netgear FE516 Stackable 100 16 port, RJ-45	.649
Netgear SW502/507/510/518 Switches	.Call
Netgear FS102/FS104 Fast Ethernet Switch	.Call
Netgear FS508 8 Autosensing switched ports	.Call

3COM

	$
3C509 TPO oem	52
3C515-TX 10/100 ISA oem	.109
3C900 PCI Combo oem	.79
3C905-TX 10/100 TP PCI oem	.69
3C905B-TX PCI oem	.79
3C589D Etherlink III PCMCIA TP/Combo	.135/175
3C16590 Dual Speed 12 Port Hub	.1155
3C16670A Superstack II 12 Port Hub	.465
3C16670A Superstack II 24 Port Hub	.789
3C16700 TPO Office Connect Hub (8TP)	.94
3C16701 TPC Office Connect Hub 16TP 1BNC	.125
3C16722 TP800 8 Port Fast Hub	.335

CISCO SYSTEMS

	$
Catalyst 1900 Switch 24 TP	1389
Catalyst 2820 Switch 24-10SW	.1479
CPA 1604 Bridge w/NT1	.1279
CPA 2501 Router	.1679
CPA 2514 Router	.1999
CPA 2524 Router	.2499
CPA 4500 Router	.CALL

HEWLETT PACKARD

	$
J2550B Jet Direct TP	269
J2552B Jet Direct Combo	.329
J2555B Jet Direct Token Ring	.549
J2556B Jet Direct 10/100 Combo	.389
J2591A Jet Direct EX Plus Combo	.229
J3110A Direct TP for LJ 4000 Series	.239
J3111A Direct Combo for LJ 4000 Series	.289
J3113A Direct TP 10/100 for LJ 4000 Series	.399
J2610B AdvancedStack 8 Port hub	.239
J3200A AdvancedStack 12 Port Switching	.419
J3202A AdvancedStack 24 Port Switching	.819

SOFTWARE

MICROSOFT

	$
MS Win 95 Retail Pk.	179
MS NT 4.0 Workstation.	.259
MS NT Server 4.0 5 User	.749
MS NT Server 4.0 10 User	.989
MS Office 97 Pro Retail Pk.	.489
MS Office 97 Pro Upgrade Ret	.289
MS Small Biz Server 5 User	.1399
MS Frontpage 98	.129
MS Publisher 98	.99

Microsoft SOLUTION PROVIDER

NOVELL

Novell.

	$
Intra Netware 4.11	179
For 5/10/25 user	.689/1279/2059
For 50/100/250	.2799/3899/7199
For 500/1000	.14999/2999

SYMANTEC

	$
ACT! V3.0 for 95 and NT	169
Norton Antivirus Deluxe 4.0	.69
Norton Uninstall Deluxe	.49
Norton Utilities 95 V3.0	.69
PC Anywhere 8.0 Remote&Host	.135

ADOBE

	$
Photoshop 4.0 Win	599
Pagemaker 6.5 Win	.499
Illustrator 7.0 Win	.359
Premier v4.2 Win	.479
Framemaker 5.5	.699
Acrobat 3.0.1	.189
Acrobat Capture 2.0	.545

IBM

IBM

	$
Via Voice for Win	89
Via Voice Gold for Win	.135

PRICES REFLECT A 2% CASH DISCOUNT

SCANNERS

EPSON

Expression 636 36 bit Executive SCSI	.695
ES1000C 30 bit SCSI or bi-directional PP	.Call

HP

HEWLETT PACKARD

HP Scanjet 5P	.249
C5193A Scanjet 5100CXi	.279
C6267A Scanjet 6100	.699
ADD Auto Document Feeder (C6265A)	.449
C1307A Network Scanjet 5 Ethernet	.Call
C1308A Network Scanjet 5 Token Ring	.Call
C1310A Network Scanjet 5 Fast Ethernet	.Call

MICROTEK

Scanmaker E6 1200dpi	.265
Scanmaker E6 Pro w/Photoshop	.489

STORM TECHNOLOGY

SPECIAL OF THE MONTH

Internal Photo Scanner IDE
-400 Dpi Optical Resolution
-2400 Dpi Max. Resolution
-Includes Interface ISA Card
-Includes EZ Photo for Win95
-Sealed Retail Box

$59

UMAX

Astra 610P PC	.135
Astra 610S w/Photodeluxe	.149
Astra 1200S W/Photodeluxe	.249
Astra 1200S w/ Photoshop	.449
Astra 1220P 36 Bit 600 Dpi Parallel Port	.Call
Powerlook II for MAC SCSI	.Call
Powerlook III for MAC SCSI	.Call

POWER BACK-UP

APC

BackUPS Stand By Power, 280VA	.95
BackUPS Stand By Power, 400VA	.129
BackUPS Stand By Power, 450VA	.169
BackUPS Stand By Power, 600VA	.229
Smart UPS Net PnP w/Powerchute,620VA	.289
Smart UPS Net PnP w/Powerchute, 1100VA	.479
Smart UPS Net PnP w/Powerchute, 1400VA	.599

SAN JOSE

780 Montague Expwy.
San Jose, CA. 95131
X-street: O'Toole Ave.
(P): 408-321-9488
(F): 408-321-9353
Hours: M-F 9-6 Sat. 10-4

PLEASANT HILL

508 Contra Costa Ave
Pleasant Hill, CA. 94523
X-street: 2nd Ave. South
(P): 510-798-7888
(F): 510-798-8396
Hours: M-F 10-7 Sat-Sun 10-4
OPEN 7 DAYS A WEEK

MILLBRAE

39 EL CAMINO REAL
Millbrae, CA. 94030
X-street: Millbrae Ave.
(P): 650-652-0888
(F): 650-652-0899
Hours: M-F 9:30-6:30
Sat. 10-4

PLEASANTON

COMING SOON!!!
Pleasanton, CA. 94588
X-street: Hopyard Rd.
(P): 510-XXX-XXXX
(F): 510-XXX-XXXX

LAITRON

Since 1991

"Your Total Computer Solution"

REMOVABLE STORAGE

IOMEGA

ZIP Drive 100MB IDE int.	$89
ZIP Drive 100MB SCSI int. (oem)	125
ZIP Drive 100MB SCSI Ext	139
ZIP Drive 100MB Parallel Port.	139
ZIP Plus 100MB SCSI & Parallel.	185
ZIP Zoom SCSI Accelerator Card	45
ZIP 100MB Disk 1/3/10	12/35/115
JAZ Drive 1GB SCSI Int..	275
JAZ Drive 1GB SCSI Ext..	365
JAZ 1GB Disk 1/3/5	79/234/387
JAZ Traveller..	44

SYQUEST

Sparq 1GB IDE Int..	$189
Sparq 1GB Parallel Port Ext..	199
Syjet 1.5GB IDE Int	275
Syjet 1.5GB Parallel Port	289
Syjet 1.5GB SCSI Int..	279
Syjet 1.5GB SCSI Ext..	299
Syjet 1.5GB Disk	64

AVATAR

Shark 250MBParallel Port..	$199
Shark 250MB PCMCIA.	209

TAPE BACKUP

EXABYTE

Eagle TR3 3.2 Int.	$144
EXB 8700LT 8mm 5-10GB Ext.	674
Eliant 820S7-14GB, Int	1515
Eliant 820S 7-14GB Ext.	1769
Mammoth 8900SL 20-40GB Int	2975
Mammoth 8900SL 20-40GB Ext	3215
210RK Auto Library 70-140GB	5995

HP

C1534 4mm DAT 2GB SCSI Int.	$545
C1536 4mm DAT 2-4GB SCSI Int.	575
C1554 DAT 24GB DDS-3 Int.	1039
C1599 DAT 8GB DDS-2 Int.	709
C5648A DAT 24GBX6 Autoloader	2579
C5644B Surestore T4i 4GB Int..	349
C5645 Surestore T4e 4GB Ext..	449
C1549A Surestore DLT 30GBExt.	3079
Mounting Brack 1534,1536,1599	29
Mounting Brack 1554	29

IOMEGA

Ditto 3200MB Int..	$138
Ditto 3200MB Parallel Port.	238
2GB Tape 1/3.	19/57

SONY

Lanbacker 7000: 8GB DDS-2 Int..	$889
Lanbacker 7000: 8GB DDS-2.Ext	1099
Wanbacker 7000: 8GB DDS-2 Int.	1529
Wanbacker 7000: 8GB DDS-2 Ext	1779
Wanbacker 9000: 24GB DDS-3 Int.	1899
Wanbacker 9000: 24GB DDS-3 Ext.	2169
4mm 120M Tape for DDS-2.	14
4mm 125M Tape for DDS-3.	28

THE SCSI SPECIALISTS

"NOBODY BEATS OUR PRICES ON SCSI"

IBM

2.1GB UW SCSI 76H5814 5400RPM	$185
4.3GB Ultra SCSI 5400 RPM	275
4.3GB Ultra Wide SCSI 5400RPM	269
9.1GB Ultra Wide SCSI 7200RPM	689

QUANTUM

2.1GB Ultra SCSI ST32100SE	$199
3.2GB Ultra SCSI ST33200SE	275
4.3GB Ultra SCSI Atlas II ST34300SE	349
6.4GB Ultra SCSI Atlas II ST36400SE	379
4.5GB Ultra Wide SCSI Viking II XP34550W	489
9.0GB Ultra Wide SCSI Viking II XP39100S	739

SEAGATE

2.2GB Ultra SCSI ST32272N	$319
2.2GB Ultra Wide SCSI ST32272	339
2.1GB Ultra Wide SCSI	249
4.5GB Ultra SCSI ST34572N	509
4.5GB Ultra Wide SCSI ST34572W	529
4.5GB Ultra Wide SCSI ST34501W 10,000RPM	649
4.5GB Ultra Wide SCSI	435
9.1GB Ultra SCSI 19171N 7200RPM	789
9.1GB Ultra Wide SCSI 9LP 7200RPM	819
9.1GB Ultra SCSI 19101N 10,000RPM	939
9.1GB Ultra Wide SCSI 19101W 10,000 RPM	949
23GB Ultra Wide SCSI	1599
47GB Ultra Wide SCSI	3495

WESTERN DIGITAL

2.17GB Ultra SCSI E2170	$329
2.17GB Ultra Wide SCSI E2170	359
4.3GB Ultra SCSI E4360	479
4.3GB Ultra Wide SCSI E4360	499
9.1GB Ultra Wide SCSI E9100	799

SCSI CONTROLLER CARDS

ADAPTEC

2940 SCSI PCI (oem)	$149
2940U SCSI PCI oem/retail	159/225
2940UW Ultra Wide SCSI PCI oem/Retail	169/229
3940 Multichannel SCSI PCI	389
3940 Ultra Wide SCSI w/kit	459
2940U2W Ultra Wide SCSI 80Mb/sec oem	299
1460B Slim PCMCIA SCSI	159
AAA-131 Raid Single Channel/CA	429/509
AAA-133 Raid 3 Channel	679

DIAMOND

FIREPORT 40 ULTRA WIDE SCSI (oem)	$98

ULTRA DMA IDE

"TWICE AS FAST AS EIDE.....33MB/Sec"

IBM

6.4GB Deskstar Ultra DMA IDE	$229
14.4GB Deskstar 7200 RPM Ultra DMA IDE	Call
16.8GB Deskstar 7200 RPM Ultra DMA IDE	Call

QUANTUM

3.2GB Ultra DMA IDE	$149
4.3GB Ultra DMA IDE	169
6.4GB Ultra DMA IDE	215
8.4GB Ultra DMA IDE	299

WESTERN DIGITAL

2.0GB Ultra DMA IDE	$139
3.2GB Ultra DMA IDE	149
4.3GB Ultra DMA IDE	169
6.4GB Ultra DMA IDE	215
8.4GB Ultra DMA IDE	299

MAXTOR

8.4GB Ultra DMA IDE	$279

CD RECORDERS & REWRITABLE

YAMAHA

CRW 4001 EIDE Int 6X Read, 4X Write, 2X ReWrite	$479
CDR 400 6X Read, 4X Write Ext	565
CRW 4260 4X/2X/6X SCSI Int Rewritable (Retail Pk)	539
CRW 4260 4X/2X/6X SCSI Ext Rewritable (Retail Pk)	629

HEWLETT-PACKARD

HP C7200i Rewritable 6X2 Int. (Retail Pk)	$399
HP C7200e Rewritable 6X2 Ext. (Retail Pk)	499

RICOH

Ricoh 6X/2X SCSI Int/Ext (Retail Pk)	$459/559

SONY

Sony 928e 8X/2X IDE Int. (Retail Pk)	$305
Sony 960 6X/2X SCSI Int (Retail Pk).	359

SMART & FRIENDLY

Smart and Friendly 4X6 SCSI Ext. (Retail Pk)	$679

MITSUMI

Mitsumi 8X2 IDE Recorder Int. (Retail Pk)	$299

TEAC

Teac CDR 4X4 SCSI Recorder Int. (oem)	$329

BLANK CD MEDIA

Maxell CDR 74 min 680MB single/10 Pack	$2.50/22
TDK CDR 74 min 680MB single/10 Pack	2.50/24
KAO CR 74 min 680MB single/10 Pack	2.25/21
KAO CDR 74 min 680MB single/10 Pack	2.50/24
KAO CDRW Rewritable	16.95
HP CDR 74 min 680MB single/10pk/25pk	3.50/28/65
HP CDRW Rewritable (C4431)	18.95

LAITRON http://www.laitron.com

ATM POs

BERKELEY
2113 University Ave.
Berkeley, CA. 94704
X-street: Shattuck
(P): 510-647-1777
(F): 510-647-1333

HAYWARD
24901 Santa Clara St. SteB3
Hayward, CA. 94544
X-street: Tennyson
(P): 510-266-0606
(F): 510-266-0522

CORPORATE HQ
5005 Brandin Court
Fremont, CA. 94538
X-street: Christy St.
(P): 510-657-3400
(F): 510-661-2012

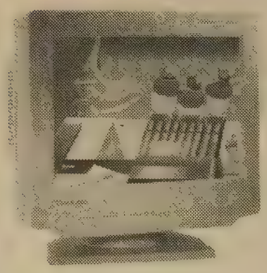
PLEASANTON
COMING SOON!!!
Pleasanton, CA. 94588
X-street: Hopyard Rd.
(P): 510-XXX-XXXX
(F): 510-XXX-XXXX

LAITRON

Since 1991

Laitron Computer now offers our customers a 2 year warranty on parts and labor on all computer systems. In order to keep our customers up and running, we will also be offering our customers a 24 hour swap on components that become defective within the first year of the warranty period.**

MONITORS



PC MAGAZINE EDITORS' CHOICE

VIEWSONIC

	$
E641 14" 1024x768 .28	179
E655 15" 1280x1024 .28	249
15GS 15" 1280x1024 .27	279
15GA 15" 1280x1024 .27 W/Speaker & MIC	364
EA771 17" 1280x1024 .27 W/Speaker & MIC	479
G771 17" 1280x1024 .27	429
G773 17" 1280x1024 .26	449
P775 17" 1600X1200 .25	499
PT770 17" 1600x1200 .25	569
PT775 17" 1600x1200 .25	619
G800 20" 1600x1200 .28	939
G810 21 1600x1200 .25	989
P810 21" 1600x1200 .25	1115
PT813 21" 1600x1200 .28	1229
P815 21" 1600x1200 .25	1279
29GA 29" 1280x1024 .75 ST	1979
VP140 14" LCD Monitor	999

NEC

	$
A500 15" 1280x1024 .28	264
E500 15" 1280x1024 ..25	329
M500 15" 1280x1024 .25	339
A700 17" 1280x1024 .28	459
E700 17" 1600x1200 .25	649
M700 17" 1280x1024 .25	675
P750 17" 1600x1200 .25	769
E1100 17" 1600X1200 .28	1119
P1150 17" 1600x1200 .25	1239
LCD400 14.1" 1024x768 .28	1635
LCD400V 14.1" 1024x768 .28	1445

SONY

	$
CPD-100ES 15" 1280X1024 .25	299
CPD-100GS 15" 1280x1024 .25	349
CPD-200GS 17" 1280X1024 .25	635
CPD-200ES 17" 1280x1024 .25	565
GDM-200PS 17" 1600x1200 .25	789
GDM-400PS 19" 1280x1024 .25	989
CPD-300SFT 21" 1280X1024 .30	1129
CPD-500PS 21" 1600x1200 ..28	1649

innov8

	$
1588 15" 1024x768 .28	169
1788 17" 1280x1024 .27	299
1789 17" 1280x1024 .26	339
1988 19" 1600x1200 .26	549

Innov8 Monitors give you high performance features and superb quality at prices that you can afford. These monitors are perfect for the user who works with anything from word processing to video conferencing. Also, the entire Innov8 monitor line comes standard with a built in MIC, and a 42 month warranty.

DIGIVIEW

	$
HR1435 14" 1024x768 .28	129

IIYAMA

	$
8515G 15" .28	249
8617E 17" .26	479
9017E 17" .25	549
S901G 19" .26	779
9021E 21" .30	1119
8721E 21" .27	1159
9221E 21" .28	1119
3601GT 14.1" LCD .279	999

PCWORLD BEST BUY

Prices Reflect a 2% Cash Discount

VIDEO CARDS

DIAMOND

	$
Diamond 3D 2000 Pro 2MB PCI	59
Diamond 3D 2000 Pro 4MB PCI	79
Diamond 3D 3000 4MB VRAM PCI (retail pk)	119
Diamond 3D 4000 4MB AGP	79
Diamond Stealth II S220 4MB SGRAM PCI	98
Diamond Viper 330 4MB PCI	135
Diamond Viper 330 4MB AGP	136
Diamond Monster 3D 4MB	109
Diamond Monster 3D II 8MB	215
Diamond Fire GL 1000 Pro 8MB PCI	179
Diamond Fire GL 1000 Pro 8MB AGP	195
Diamond Fire GL 3000 8x16 VRAM/DRAM PCI	799
Diamond Fire GL 3000 8x32 VRAM/DRAM PCI	999
Diamond Fire GL 4000 15x4 3DRAM/CDRAM	2259
Diamond Fire GL 4000 15x16 3DRAM/CDRAM	2639

ATI

	$
ATI All-in-Wonder 4MB PCI	179
ATI All-in-Wonder Pro 4MB PCI	209
ATI All-in-Wonder Pro 8MB PCI	269
ATI Xpert@Play 4MB AGP	129
ATI Xpert@Play 4MB PCI	125
ATI Xpert@Play 8MB AGP	175
ATI Xpert@Play 8MB PCI	174
ATI Xpert@Work 4MB AGP	119
ATI Xpert@Work 4MB PCI	115
ATI Xpert@Work 8MB AGP	169
ATI Xpert@Work 8MB PCI	168

NUMBER NINE

	$
Revolution 3D 128 4MB AGP	169
Revolution 3D 128 4MB PCI	159
Revolution 3D 128 8MB AGP	209
Revolution 3D 128 8MB PCI	210
4MB Upgrade for Revolution	135

MATROX

	$
Mystique 220 2MB PCI	75
Mystique 220 4MB PCI	95
Millenium II 4MB WRAM AGP	139
Millenium II 4MB WRAM PCI	135
Millenium II 8MB WRAM AGP	199
Millenium II 8MB WRAM PCI	195
Rainbow Runner Studio (upgrd. for mystiq)	175
Rainbow Runner Television	88
Matrox M3D 4MB Upgrade	88
Memory Upgrade for Mill II 4/8/12MB	125/189/265

SAN JOSE

780 Montague Expwy.
San Jose, CA. 95131
X-street: O'Toole Ave.
(P): 408-321-9488
(F): 408-321-9353

PLEASANT HILL

508 Contra Costa Ave
Pleasant Hill, CA. 94523
X-street: 2nd Ave. South
(P): 510-798-7888
(F): 510-798-8396

MILLBRAE

39 EL CAMINO REAL
Millbrae, CA. 94030
X-street: Millbrae Ave.
(P): 650-652-0888
(F): 650-652-0899

PLEASANTON

COMING SOON!!!
Pleasanton, CA. 94588
X-street: Hopyard Rd.
(P): 510-XXX-XXXX
(F): 510-XXX-XXXX

LAITRON

Since 1991

"Your Total Computer Solution"

FOR THE LOCATION NEAREST YOU PLEASE CALL
1-888-LAITRON (1-888-524-8766)

MOTHERBOARDS

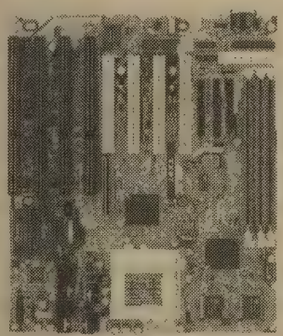
SP97-V w/ up to 4MB Video $85
SP97-V w/ max 4MB Video ATX .$99
TXP4 119
TXP4X ATX 512K 129
XP55T2P4 ATX 139
TX97 135
TX97-E 135
TX97-X 139
TX97-XE 139
TX97-XE w/audio 169
P2L97 P-II AGP, PCI, DIMM 159
P2L97S P-II, AGP UW SCSI 249
P2L97DS Dual P-II w/2940UW ..399
P2B 440BX P-II 233-400MHz ...199
P2B 440BX-S P-II w/Adap. UW .299

intel

Anchorage 512K w/sound 159
Atlanta Pentium II AGP 169
Atlanta Pentium II AGP, PCI, EIDE, IO, Sound Chip On Board 179
Seattle BX Pentium II AGP 219
Dakota Dual P-II AGP UW SCSI .509

ABIT (jumperless)

PX5 w/512K AT TX 95
AX5 w/512K ATX w/USB TX 109
LX6 P-II w/512K AGP 2 USB .....
4PCI, 3ISA, 4 DIMM 139



CPU and MEMORY

AMD K6 166/200/233 ....$79/89/99
Intel 133/150 .....97/99
Intel 200 MMX/233 MMX 119/139
Intel P-II 233/266/300 ..219/259/379
Intel P-II 333/350/400 ..509/619/849
EDO SIMMS 16/32/64 .....28/49/149
SDRAM 32/64/128 .....59/129/249

Prices reflect a 2% Cash Discount.

CD-ROMS & DVD

ASUS

Asus 34X IDE $75

MITSUMI

Mitsumi 32X IDE $75

NEC

NEC 24X IDE $79
NEC 24X SCSI 99

PLEXTOR

Plextor PX-20X SCSI int. (Tray) $199
Plextor PX-32X SCSI int. (Caddy) 265
Plextor PX-32X SCSI int. (Tray) 225

TEAC

Teac 24X IDE $69
Teac 32X IDE 79

TOSHIBA

Toshiba 24X IDE $69
Toshiba 32X IDE 79
Toshiba 32X SCSI 109
Toshiba DVD Cinemaster 279

SOUND CARDS

CREATIVE LABS

Sound Blaster 16 PnP $39
Sound Blaster Awe 64 Value oem/retail 69/95
Sound Blaster Awe 64 Gold 169

KEYBOARDS

Keytronic 3601 PS/2 .....$25
Keytronic 3601 AT 24
Microsoft Natural Keyboard oem 49
Mitsumi Win95 EAZE PS/2 15
Mitsumi Win95 EAZE AT 14

FAX/MODEM

US ROBOTICS

USR 33.6K Fax/Modemw/voice oem $69
USR 56K V.90 Fax/Modem oem int. 125
USR 56K V.90 Fax/Modem w/Voice oem int 139
USR 56K V.90 Fax/Modem Ext. 189
USR X1560 56K PCMCIA 199

SUPRA

Supra 33.6K Fax/Modemw/voice oem $59
Supra 56K Max V.90 Fax/Modem oem 79
Supra 56K Express V.90 Modem w/Voice oem ...95
Supra 56e V.90 Fax/Modem retail 129

PRINTERS

EPSON

Epson Stylus 400 Color 720dpi 3ppm $179
Epson Stylus 600 Color 239
Epson Stylus 800 Color 720x1440 dpi 8ppm 329
Epson Stylus 1520 Color 720 dpi 739
Epson Stylus Photo 349
Epson Stylus 3000 1649
Black ink for Stylus 400/600/Photo 19
Black ink for Stylus 800 19
Color ink for 400/600/800/1520 23

HEWLETT PACKARD

HP Deskjet 692C $269
HP Deskjet 720C 329
HP Deskjet 870CXi 319
HP Deskjet 890CXi 399
HP Deskjet 1120 CXi 11x17 Prints 475
HP Deskjet 1600C 1269
HP Deskjet 1600CM 1829
HP Laserjet 4V 1769
HP Laserjet 5si/5siMX 4349/6499
HP Laserjet 6LXi 389
HP Laserjet 6PXi 739
HP Laserjet 4000 1099
HP Laserjet 4000N 1369
HP Laserjet 4000T 1239
HP Laserjet 4000TN 1559
HP Color Laserjet 5 3799
HP Color Laserjet 5M 4899

PRINTER MEMORY

HP Laserjet 4000 series .....$
4/8/16 MB EDO Module 57/95/185
4/8/16/32 MB SDRAM Module 69/99/189/349
HP Laserjet 5L,6LXI,6L .....
4/8 MB 69/99
HP Color Laserjet 5,5M,1600C .....
4/8/16/32 MB 38/58/95/169
HP Laserjet 4V,4+,5/5N/5P/5Si,6P .....
4/8/16/32 MB 38/58/95/169
HP Laserjet 4/4M/4Si/1200C .....
4/8 MB 54/85
HP Laser III,IIIP,IIID .....
1/2/4 MB 65/85/169

intel COMPAQ IBM
HEWLETT® PACKARD TOSHIBA

We are an Authorized Service Center for COMPAQ and HP

TERMS AND CONDITIONS

1) One year parts and Three year labor warranty.
2) Prices and availability are subject to change without notice or obligation.
3) Shipping, COD, & insurance are extra and not refundable.
4) All prices reflect cash discount.
5) All returns must have Return Merchandise Authorization (RMA) Number.
6) All returns must be in original packaging complete with manual, software,...etc.
7) 15% restocking charge on returns after three days.
8) Laitron Computer is not responsible for any typos
9) All Prices are final on the date of purchase.
10) Some Items may require special orders.
11) Price matching only applies to local competitors Mail order, closeouts, limited quantites excluded
12) Laitron Computer will swap defective parts with comparable components that match current MV

POs ATM VISA

continued from page 98

our Internet customers and if they want financing, we're going to send 'em to you. We want the best rate in the US." So they gave us an across-the-board rate that is almost unbeatable. We're at credit union numbers for customers coming through the Internet on a national basis.

What'd I do for you? I did a favor for you as a customer. I did a favor for the finance institution 'cause I lowered their costs with the amount of business we send them, incremental business that they would have never seen. And then—catch this!—we now brought the dealer into the equation, and they make money on the financing. And we've still got the lowest rate.

So we've taken nothing away from the dealer. All we've done is provide efficiencies that the Internet allowed us to do. And we have given the customer the benefit of those efficiencies.

Instead of having the five people that the customer gets marched through at the dealer's, they deal with one person, and on the back end, as it were, Auto-By-Tel is handling the things that those five people did.

Right. We bring the dealer a shrink-wrapped customer [*laughs*], you know, financing, sold, "I'm going to buy a 1998 Eddie Bauer Ford Explorer moon-roof, 246a package, cranberry, parchment interior." That's what we do.

Then there's the financing, there's add-ons—How does that work?

We've moved the financing onto the Internet. The after-market product will be moved on within the next couple of months.

After-market is like moon-roofs and...

Service agreements, telephones—whatever. Through our electronic system—'cause all of the dealers now are moving to an electronic interface on our database—they can put their product in there. So when you're on the Internet and you put in a request for a Suburban, out will come a little menu that says, "This dealer has made available to you running boards, regular $395, $225. Cellular phones, regular $295, $50 with activation." So you can buy these things from the dealer without being pressured.

Now. What benefit does that give to you or the dealer? Well, we're telling the dealer, "If you've taken out $600 worth of personnel costs in the car, and those personnel costs are there to try to sell you the cell phone, sell you the running board, take it off the cost of your after-market product and give the customer a benefit for coming to you shrink-wrapped. And let the customer make the choice, where they've actually pulled the product out of you, rather than you've pushed it down their throats."

We have got dealers where the lightbulb has gone on across the United States, and they go, "I got it!"

And then we have dealers that still are saying, "I got it!"—and then they go back to their dealership and they're saying, "Those people aren't going to tell me how to do my business." And they continue to stay ax murderers.

Well, when they do that, we find out who they are pretty quick and take them off the program.

I say, "We're not telling you how to sell cars. What we're doing is telling you what the customer wants. If you can deliver what the customer wants, you can be part of Auto-by-Tel, and if you can't deliver what the customer wants, then you need to go away."

And we look for guys with a lightbulb on that says, "I'm in this for the long haul, and I'm going to take care of the customers and I'm going to make this work."

When dealers come to you what are they driven by? Terror? [*laughter*]

In May, 1995 a dealer back East called me up and he said he wanted to sign on the program. So I talked to him and I explained to him how the program worked just like I've talked to you, and he said, "I want you to know this, Pete Ellis—I'm going to take this program, I'm going to send you a check."

Remember we grant dealers exclusive territories, so if there's three or four dealers in Oakland and I give it to one, the others that didn't get it are out. So this dealer said, "I'm taking it to protect my territory. But make no mistake about this, Pete Ellis, you are the enemy."

That's a little conflicted of him, isn't it?

Yeah.

He said, "I'm going to take it to protect my territory," and that's the fear.

And I said, "Wait a minute, we're your savior, not your enemy, because if the marketplace wants a change in the way people buy cars, and e-commerce is going to become a model, then the investment that you've made with us to stay at the cutting edge in the very front of this transition will keep you ahead of your competitors.

"Rather than be someone that you look at as an enemy, we should be looked at as your salvation and your savior in this thing, because that's truly who we are. We're making a huge investment in a technology infrastructure to drive down your costs and to bring you more customers, and, essentially, your competitor across the street, who wants to try and match you dollar for dollar in terms of pricing, will not have the competitive advantage you do. And over time, it'll be like him putting a 12-gauge shotgun to his head and pulling the trigger.

"So you will win in this deal. But in order to win, we've all got to be partners in this and I'm meaning it's a triumvirate: The customer, you, and us."

In a non-adversarial relationship.

Yeah, yeah. We're your friend.

And so now, we have dealers that really understood this, and have made substantial investments in making this work in their businesses. In a lot of dealerships across United States we account for about 40% of their volume.

At some point in time, when most of our dealers are seeing a good portion of their business come through their doors through Auto-By-Tel, our thought is: "Take down your old structures. Get rid of your old sales models and just convert to a totally consumer-friendly model that offers low costs—and we have become your catalyst to change to a new selling model that you never had before." That's our long-term goal. The thing that we hope at the very end is that all of our dealers are the ones that are left standing and doing real well, because they addressed the issues head on with the consumer.

In this letter I was reading from earlier, Anderson came out and said that the car companies are interested in trying to beat the other competition. They're not interested in trying to figure out how to change the channel and make it better for the consumer. Because whatever is better for the consumer is consumer-driven and if it's consumer driven the manufacturers lose control. And they don't want to lose control.

And that's, in a sense, entirely what the Internet is about—seizing control back, doing end-runs around existing power structures.

Yeah, the consumer ends up controlling it, you know.

Do we win every time? No. Will we win every time? Each year it's going to get better.

We have some things right now that happen at dealerships that we don't care for, we find out about it, and we get into it, but at least we're that third party that's doing it. And because I understand the industry and our people in here understand the industry, we're a lot more effective than any one individual could be.

We Make the Latest Technology EASY
Since 1992 we've provided you solutions

Our Services Include:

- Complete Networking Services Including Conversion & Troubleshooting
- Software Configurations
- Custom System Configuration
- Monitor and Printer Repairs
- On-site Service

Microsoft WindowsNT

3Com® intel®

PERFORMANCE SYSTEMS

- Intel Pentium® Processor
- Intel Anchorage Motherboard
- 512K Pipeline Burst Cache
- 32MB SDRAM
- 4.3GB Hard Drive
- 32X CD-ROM Drive
- 1.44MB Floppy Drive
- Optiquest Q51 Monitor 13.7" Viewable
- Diamond Stealth 3D w/4MB EDO
- Built-in Sound Card
- P52 Mouse
- Amplified Speakers
- Mid ATX Tower Case w/PS
- US Robotics Sportster 56K V90 Fax/Modem
- Maxi Nova Keyboard
- Windows 95

P-200MMX.....$1,179
P-233MMX.....$1,209

SUPER SYSTEMS

- Intel Atlanta Motherboard
- 64MB SDRAM
- 6.3GB WD Hard Drive
- Diamond Viper 4MB SG RAM
- Teac 1.44 Floppy Drive
- Toshiba 32X CD-ROM Drive
- Integrated Sound Card
- ADI 5P 16" Viewable Monitor
- Kentronics Keyboard
- ATX Medium Tower Case
- Multimedia Speakers
- Windows 95
- Microsoft IntelliMouse

Pentium® II-233MHz $1,559
Pentium® II-266MHz $1,599
Pentium® II-300MHz $1,739
Pentium® II-333MHz $2,009
Pentium® II-350MHz $2,129
Pentium® II-400MHz $2,369

Brand Name Savings

Western Digital 4.3GB Hard Drive $180

Lanpro 8-Port Hub $60

HP ScanJet 5100Cxi $299

Toshiba 32X CD-ROM Drive $79

15" Optiquest Q51 Monitor $205

Iomega IDE Zip Drive $100

MULTIMEDIA

Toshiba 24X CD-ROM Drive	$65
Toshiba 32X CD-ROM Drive	79
Sound Blaster 16	45
Sound Blaster 64	75
Stereo Speakers	from 15

NOTEBOOKS

IBM	CALL
Toshiba	CALL
Fujitsu	CALL

CASES

Mini Tower Case w/PS	$55
Baby AT Case w/PS	65
Mid-Tower w/PS	65
Full-Tower w/PS	85
ATX Mid-Tower Case	85
ATX Full-Tower	119

VIDEO CARDS

MGP Card	$15
Stealth 64, 3D EDO 4MB	75
Stealth 4MB VRAM 3D	169
Matrox Mystique 4MB SGRAM	129
Matrox Millennium 4/8MB	189/229

KEYBOARDS

Maxi Nova	$25
Keytronic	30
Focus 2001	35
MS Natural Keyboard	75
Cirque Glidepoint Keyboard	89
Keytronic Wireless Keyboard	89

HARD DRIVES

2.5GB IDE	$149
3GB IDE	169
4.3GB IDE	189
6.4GB IDE	239
8GB IDE	349
2GB SCSI	239
4GB SCSI	309

MONITORS

SVGA NI 1024x768 .28dp 14"	$145
Samsung 500S 13.8" Viewable	$199
Optiquest Q51 13.7" Viewable	$209
ADI 5P 28dp16"Viewable	379
Sony 100ES	309
Sony 200ES	605
NEC A700	550
Viewsonic G810	$1219

MICE

MS Mouse	$49
Logitech MouseMan	39
Logitech MouseMan Plus	59
Logitech Marble Trackman	79
Kensington Expert Mouse	89
Alps GlidePoint Mouse	69

CONTROLLERS

IDE I/O Controller High Speed	$29
Promise 2300 Plus	59
Adaptec 2940 PCI SCSI	169
Adaptec 2940U Wide SCSI	199

MOTHERBOARDS

Pentium® 200MMX w/CPU	205
Pentium® 233MMX w/CPU	235
Pentium® II-233MHz w/CPU	399
Pentium® II-266MHz w/CPU	439
Pentium® II-300MHz w/CPU	599
Pentium® II-333MHz w/CPU	809

PRINTERS

Hewlett Packard

DeskJet 720C	$299
DeskJet 890CXi	409
DeskJet 1000CXi	499
LaserJet 6LXi	399
LaserJet 6PXi	779
LaserJet 4000	1,169

MODEMS

US Robotics 33.6 Int./Ext.	$99/129
US Robotics 56.6 Int./Ext. V90	159/199
Megahertz 56K PCMCIA	249

TAPE BACKUPS

Colorado 4000S Int.	$399
Colorado 3.2GB Int.	179
Colorado 5GB Int./Ext.	219/269
Iomega Zip Drive IDE Int.	100
Iomega Zip Drive SCSI Ext.	159
Iomega 1GB Jaz Drive Int/Ext.	269/309

NETWORKING

8-Port Hub	$60
16-Port Hub	199
3COM 8-Port Hub	109
3COM 3C509 T/P/Combo	55/69
3COM 3C509 PCMCIA 10BT/Combo.	139/189
3COM 3C900TP/3C900C	69/85
3COM 3C905.	79
SMC Elite Combo	75

MISCELLANEOUS

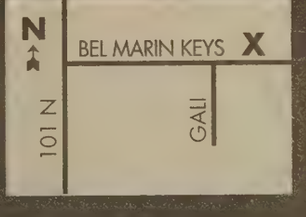
Various Cables/Adapters	CALL
Heat Sink w/Fan	$9
Printer Auto Switch	19
Joystick	from 15

BCS A
Bay Computer Systems of America
Since 1992

(415) 382-1BCS
(1227)

Fax: (415) 883-8104
385 Bel Marin Keys Blvd, Suite C
Novato, CA 94949
Hours: M-F 10-6 SAT 11-4

MasterCard VISA



*Prices subject to change without notice "Not Responsible for typographical errors"

I think it's been that model that has really driven our volume so high. We started this company with the idea that we were going to have 15–18,000 customers a year. A year! And in the sixth day that we lit the product on Prodigy, we got 1,348 requests for cars.

You definitely struck a nerve.

We thought, "Wow!"

I just checked this morning (April 15). We had 3,700 requests for cars today. Just today.

Were those all firm purchase requests?

"I want a 1998 Toyota Camry in black with all these things and I'm buying within 30 days." Most of them within a week. We've got a highly qualified, highly motivated, highly educated, ready-to-pull-the-trigger buyer. The numbers continue to get bigger because there's a lot of people using the system and it's working for them, and we continue to monitor the process and build the quality of our dealer group.

We know that when this thing gets judged in five years, it's not going to be how many people came through to buy a car, it's going to be how many people came through and *bought* a car. That's how we're going to be judged.

How does Auto-By-Tel make its money?

Dealers pay us monthly fees and we make origination fees from lenders for credit.

Do you get a cut of each car sale?

No, no we don't. It's too complicated to do it that way.

We charge a dealer based upon his product and his area. We do get a cut on each fee on the loans, but if a customer comes in to this thing and we're one or two points below any competitors out there, what do they care if we made 50 or 75 bucks? We've got to have some way to support the infrastructure.

Our travel rate in December was a million requests. We had a huge increase in January, in February and March, and our travel rate now is a little bit more than one million three.

What does "travel rate" mean?

People asking for cars. We're over 100,000 a month—well over that. The new car industry is a 15-million-car industry, approximately—14.5–15 million. Three million go to Hertz, Avis and whatnot. Twelve million go to the retail customer.

We are going to touch 10% of a trillion-dollar industry this year in terms of people coming through the system to buy a car. Not everybody buys a car from us, but we're touching 10% of the whole marketplace in the US for cars. It's huge.

As we get better and better with our dealers and control a better aspect of sales ratios at dealers because of our standards, our monitoring of standards and training of the dealers, we've got a very healthy product.

What percent of serious inquiries actually result in sales and how does that compare to the analog world?

We've got dealers in this system that are selling over 50% of the customers that come through the Auto-By-Tel system for their dealerships. We've got one dealer that's going to speak to our dealer group in May—we're going to do a satellite telecast to all of our dealers. He claims he's doing 78% of the people that come through the system, which is huge.

"The average car salesman in the US sells nine cars a month. In the Auto-by-Tel process, one person can sell 25 to 35 cars a month, because you're a highly qualified, educated, ready-to-buy customer, coming down through the Internet into a dealer, and you can be in and out of a dealership in an hour."

Traditionally, dealers do about 17%—17 to 20%. And I'd say that if we blend the good dealers and the bad dealers, we're probably somewhere in the upper 20s—25-30%, which is higher than traditional.

Our national goal by the end of this year is 50%. We've really turned the heat up on that, and part of it is our communication with dealers. We have a big dealer meeting at the end of this month with some of our top dealers to discuss strategies and how we implement fulfillment at dealerships.

Then in May, we'll talk to most of our dealers by satellite. They go to these classrooms and it's interactive, they can actually ask us questions. We talk to all of our dealers and we lay out how the strategies are put together and how to go back and make it work for customers. And then we drive that home with training sessions every month across the US. So I think we can get there. I think we can get very close to a 50% close ratio by the end of the year.

When I first saw your site it was much simpler than it is now. How did all this come about and what kind of alliance-building did it take to do it?

In the very first days, we had, "Make a request for a car." We had no spec or research information, and we were still doing pretty well. But we saw vendors out there on the Internet that were supplying information to customers, and we thought, "Boy, that's it. Let's go get the vendors on our site, where we get a customer better educated. Because the more information they have, the more apt they are to buy a car."

Historically, what has happened is that the car sells for $20,000. The customers think that the dealer paid 15, so they go to the dealer and they offer him 13 and they go through [*sounds of slapping each other around*]. Whereas now, if you know that the dealer paid 18, and maybe he's got a $500 kick or a rebate on it, so he's in at 17.5, and he tells you you can buy it at 18, you're going to say yes. What the heck, let him make a couple of hundred bucks.

We learned that having the customers have that kind of information was helpful. Not only to the customer, because it met expectations; it also worked well for the dealer because he wasn't having to go defend his position. Within about six months of the time we lit the site on the Internet we started bringing the information up and did contracts with suppliers.

We're working on something now, so that when you go through our site and you click on a Ford and you start clicking on equipment packages, it will give you totals: retail, wholesale, rebates, everything on it. And then you can just put: "I want this car," and you push, and you don't need to fill out a form. We'll have all the information that you just logged in with.

The natural progression for us, because of my background in the car business, is for me to try and build efficiencies in insurance and financing and after-market products, and used cars. Once we attack the new car model and put the platform together, the distribution platform together, then we go do used cars.

The only way we could figure used cars out was to give people a safe environment to buy them. When you buy a new car, it's a commodity. A Ford Explorer is a Ford Explorer. But a 1992 Ford Explorer is not the same as another 1992 Ford Explorer.

So, what we did with our used car product was to give the customer a money-back guarantee. It's a certified vehicle, so when the dealer sells you a car, if it's a lemon or you don't like it, you can take it back and get all your money back. That way we commoditize the used car.

That's a condition of the dealer being an affiliate?

That's right. So it's a real safe car.

Plus we put pictures up and we have a lot of warranties with the car, so we've really done, I think, a good consumer service there on that side.

One of the other big success stories on Internet business, similar to you in some ways, is

continued on page 112

Bay Area Micro Presents

THE DECAVIEW SALE

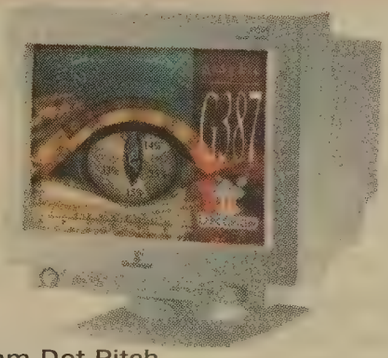
G380 17" COLOR MONITOR

- 0.28mm Dot Pitch
- 16.2 inch Diagonal Viewable area
- Max. Resolution: 1280x1024
- 1024x768@85Hz

Now Only $269

Offer good until June 15th

G387 17" COLOR MONITOR

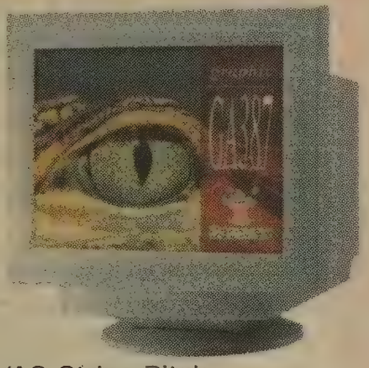


- 0.25mm Dot Pitch
- 16.0 inch Diagonal Viewable area
- Max. Resolution: 1600x1200@75Hz
- 1024x768@115Hz

Now Only $339

Offer good until June 15th

GA387 17" COLOR MONITOR



- 0.25mm/AG Stripe Pitch
- 16.0 inch Diagonal Viewable area
- Max. Resolution 1600x1200@75Hz
- 1024x768@115Hz

Now Only $399

Offer good until June 15th

PA380 17" COLOR MONITOR

- 0.25mm/AG Stripe Pitch
- 16.0 inch Diagonal Viewable area
- Max. Resolution 1600x1200@77Hz
- 1024x768@119Hz

Now Only $439

Offer good until June 15th

B.A.M. Bay Area Micro

408.260.8796

Fax: 408.260.8797

1158 SARATOGA AVE.
SAN JOSE, CA 95129

STORE HOURS Mon-Fri: 11am-6:30pm
Closed Sat & Sun

Terms & Conditions: Prices reflect cash discounts. Prices subject to change without notice. Not responsible for typographical errors. All brands and product names are trademarks of their respective companies. 15% fee on all returns including systems.

B.A.M.
Bay Area Micro

We carry all brand names, call us for all your needs!

AMD · CREATIVE · ViewSonic · ASUS · ATi · DFI · ViewSonic · Western Digital · NEC · pentium

AGP EXPERT STATION P2/300, 19" Monitor, 128MB, 8.4GB, 32X $2,249

- DFI P2XBX Intel 440LX
- Intel Pentium II 300MHz w/MMX
- 128MB SDRAM 10ns w/EEPROM
- Teac 1.44MB Floppy Drive
- Quantum 8.4GB Ultra-ATA HD
- Toshiba 32X IDE CD-ROM Drive
- ATI Expert @ Work 8MB SGRAM AGP Video Card
- Creative 64 PCI Wave Table Sound Card
- US Robotics V.90 w/Voice
- High Quality ATX Mid Tower Case
- Multimedia PS/2 Keyboard
- Microsoft PS/2 Intellimouse
- Creative PC Works Stereo Speakers w/Subwoofer
- Decaview G400 19" (18.0"v) Monitor
- Geniune Microsoft Windows 95 (OSR2.5, Revision D)
- Corel Office 7 Professional Full Retail Package

100MHz BUS SPEED IS HERE!

intel inside pentium II

P2/350	P2/400
$2469	$2675

POWER UPGRADES FOR BAM SYSTEMS

Hardware

- 32MB SDRAM to 64MB SDRAM (+$45)
- 64MB SDRAM to 128MB SDRAM (+$90)
- 128MB SDRAM to 256MB SDRAM (+$180)
- Iomega Zip Drive (+$88)
- Teac 1.44 FDD to LS120 FDD (+$105)
- 4.3GB Ultra-ATA to 6.4GB Ultra-ATA (+$40)
- 6.4GB Ultra-ATA to 8.4GB Ultra-ATA (+$60)
- 8.4GB Ultra-ATA to 12.0GB Ultra-ATA (+$160)
- Creative 3D Blaster Voodoo2 8MB (+$220)
- Creative 3D Blaster Voodoo2 12MB (+$280)
- Diamond Monster 3D II Voodoo2 8MB (+$235)
- Diamond Monster 3D II Voodoo2 12MB (+$285)
- Creative Ensoniq PCI to Creative AWE64 Gold (+$110)
- Creative 64 PCI to Creative AWE Gold (+$45)
- 3Com Fast Etherlink XL 3C905-TX (+$65)
- Intel EtherExpress Pro / 100 (+$55)
- 200W Speakers to Creative PC Works (+$60)
- 200W Speakers to Altec Lansing ACS45 (+$55)

Software

- Microsoft Windows 95 to Windows NT 4.0 (+$40)
- Microsoft Home Essentials (+$85)
  Word 97, Works 4.0, Internet Explorer, MS Arcade
  The Microsoft Network, Encarta 97,
  Microsoft Greetings Workshop
- Microsoft Office 97 Professional (+$185)
  Word 97, Excel 97, Outlook 97, Access 97
  Powerpoint 97, Microsoft Binder
- Microsoft Office 97 Small Business Edition (+$175)
  Word 97, Excel 97, Outlook 97, Publisher 97,
  Small Business Financial Manger 97,
  Automap Streets Plus

Monitors

- Decaview G380 to Decaview G387 (+$75)
- Decaview G387 to Decaview GA387 (+$65)
- Decaview GA387 to Decaview PA380 (+$75)
- Decaview PA380 to Decaview G400 (+$55)
- Decaview G400 to Decaview PA630 (+$200)

WHY BUY FROM US?

- #1 Warranty in the Industry
  3Yr Parts/Lifetime Labor
- Services are usually done while-you-wait or within 24Hrs.
- High Quality Systems using only the latest in brand name parts.
- Our systems are fully tested and burnt in.
- Our systems are fully compatble with Microsoft Windows 98 and Microsoft Windows NT 5.0
- We also do custom configurtions, so you can purchase the computer of your dream.
- Best Price for What you Get! We will beat ANYONE's advertised price for the same system using the same brands with the same warranty!

Many more options available!
Please call for unlisted parts.
We carry all major name brands!

Terms & Conditions (complete details available upon request): Prices reflect cash/certified funds discounts. Prices subject to change without notice. Not responsible for typographic errors. 15% restocking fee on all returns including complete systems. Shipping, handling and insurance are extra and non-refundable. Opened software is non-returnable (except pre-installed OS). Absolutely no refunds after 30 days. All brands and product names are trademarks of their respective companies.

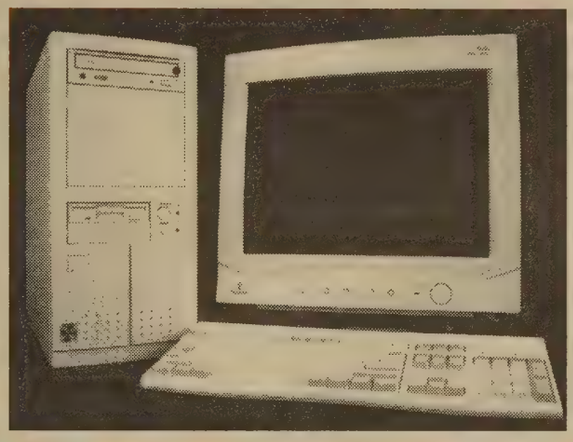
B.A.M.
Bay Area Micro

3-YEAR PARTS AND LIFETIME LABOR WARRANTY

CORPORATE, GOVERNMENT AND EDUCATIONAL POS WELCOME

AGP PRO STATION P2/233, 17" Monitor, 32MB, 4.3GB, 24X $1,249

- DFI P2XLX Intel 440LX
- Intel Pentium II 233Mhz w/MMX
- 32MB SDRAM 10ns w/EEPROM
- Teac 1.44MB Floppy Drive
- Quantum 4.3GB Ultra-ATA HD
- Toshiba 24X IDE CD-ROM Drive
- Intel 740 8MB SGRAM AGP 3-D Video Card
- Creative-Ensoniq PCI Wave Table Sound Card
- Diamond Supra 56K PCI w/Voice
- Enlight High Quality ATX Mid Tower Case
- Mitsumi PS/2 Keyboard
- Mitsumi PS/2 Mouse
- 200W Stereo Speakers
- Decaview G380 17" (16.2"v) Monitor
- Geniune Microsoft Windows 95 (OSR2.5, Revision D)
- Corel Office 7 Professional Full Retail Package



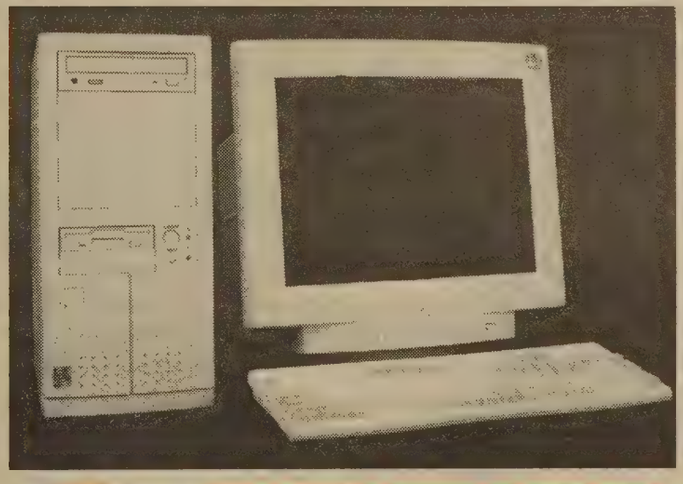
intel inside pentium II

P2/266 $1299 | P2/300 $1419 | P2/333 $1549

AGP DREAM STATION P2/300, 17" Monitor, 64MB, 6.4GB, 32X $1,649

100MHz BUS SPEED IS HERE!

- DFI P2XBL Intel 440BX
- Intel Pentium II 300Mhz w/MMX
- 64MB SDRAM w/EEPROM
- Teac 1.44MB Floppy Drive
- Quantum 6.4GB Ultra-ATA HD
- Toshiba 32X IDE CD-ROM Drive
- Intel 740 8MB SGRAM AGP 3-D Video Card
- Creative-Ensoniq PCI Wave Table Sound Card
- Diamond Supra 56K PCI w/Voice
- Enlight High Quality ATX Mid Tower Case
- Mitsumi PS/2 Keyboard
- Mitsumi PS/2 Mouse
- 200W Stereo Speakers
- Decaview G387 17" .25 (16.0"v) Monitor
- Geniune Microsoft Windows 95 (OSR2.5, Revision D)
- Corel Office 7 Professional Full Retail Package



intel inside pentium II

P2/350 $1869 | P2/400 $2075

B.A.M. Bay Area Micro

408.260.8796
Fax: 408.260.8797

1158 SARATOGA AVE.
SAN JOSE, CA 95129

VISA

STORE HOURS Mon-Fri: 11am-6:30pm
Closed Sat & Sun

continued from page 108

Amazon.com. They have no physical bookstore themselves at all, but they have a huge virtual bookstore that's got millions of little distributors.

Do you foresee a time that your model becomes so successful that the storefronts start shrinking and the physical lots start shrinking. They just pull cars from the dock as needed and their real estate costs go down and their property taxes go down. I would think some of these guys that say that they're doing 50% of their business with you would start looking at the rest of their business.

Oh, absolutely. I think we're just a little bit premature in that part of the concept, but I think you're absolutely right. It has to go there.

And the next natural step maybe—I've been there for two years, the factories haven't been—is that when you put in an order to us here, we know how to extract and make that order exactly like a factory order. Then we send it right to the factory, and the factory gets it right to the dealer through a distribution point. Then we've taken one step out.

So that when you put in a request for a Cadillac STS black or whatever, Cadillac just moves it right to the dealer once you've said, "I'm going to take it." They're aware of the customer, as well as the dealer.

Then we get to leave Cadillac in control of the process. [*laughs*] In their own mind they got to say, "Well, we got to play in this thing. We got to be in control."

We're actually talking to a couple of manufacturers because they see that as they've tried to compete with us or tried to implement parts of this model, it doesn't work. GM put this Buy Power program out and it was incredibly unsuccessful. They're trying to change parts of it, but in order to survive in the upcoming years the manufacturers are going to have to look outside their own four-walled buildings. It doesn't mean going on the Internet. It means partnering up and doing things that they never thought they'd do before.

The whole partnering thing is something that you've been extremely successful in dealing with at a number of levels. One of the things that struck me in reading your materials was that you were talking about how in a conventional model, your car dealer would spend $15,000 for a full-page ad in the Saturday *L.A. Times* to bring customers into his store, and so if he did this every week, he'd be out $60K a month just for advertising. But if he goes with Auto-By-Tel, you've essentially taken over his promotional task, right?

Yeah.

The *L. A. Times* hates you...?

You know that most newspapers in the United States will not allow our dealers to put our logo in? Boston, *L. A. Times*, I don't think the *Register* does either.

So you're totally the enemy.

Yeah

Contractually, we used to have in our agreements that the dealers had to put our logos in their newspaper ads if they were over a certain size, identifying themselves as an authorized Auto-By-Tel dealer. All across United States, we had dealers call us and tell us we couldn't do it. And then in Canada, when we tried to advertise full-page ads of Auto-By-Tel, they wouldn't take our ads. I couldn't go to the *L. A. Times* and place an ad for Auto-By-Tel. Isn't that something?

There's these various newspaper conventions and the headlines are: "How to combat Auto-By-Tel." [*laughs*] That's a headline! I'm going, "My God! Now I've got the newspapers after me."

But you, in turn, take the fees that the dealers pay you, and you go and have arrangements with the various search engine sites, and you buy Super Bowl airtime, and stuff like that.

And you know, I'd go have arrangements with newspapers if they'd let us.

It seems to me it's pretty interesting how shortsighted they are. Over time they can't win.

Some newspapers put together a deal called "Cars" to try and combat us, where they had local dealers and they could put up their cars. But the reality is they can't control the process.

How do they go tell the dealer: "By the way, you just cut that customer's hands off and we're going to get rid of you?" How do you do that? That's your revenue stream.

What kind of technological plumbing does it take to run all this? Does it all sit here on your site? Is that computer room that I saw the brains of Auto-By-Tel?

We actually have other computer rooms here, too. We have a lot more going on.

But all the operations are located here?

Yeah, but we can't do that internationally. In the European Bloc countries you're not going to be able to transmit consumer data outside of certain areas.

That was sort of an unexpected backlash of their privacy laws.

Right. So as we go forward, with Auto-By-Tel-UK or whatever, we'll move those servers and everything, and we will export the technology and systems to the local countries.

The car business was sort of a natural for this new approach because it was so customer-hostile and just so egregiously ugly for all concerned. It was ripe for improvement and you were in a position to improve it. Do you see any other similar opportunities out there that people aren't taking advantage of?

We can see a lot of things happen on the Internet that are attacking a lot of businesses that can use some type of distribution restructure. Insurances are going to really be interesting. I think this new technology is going to be phenomenal for that.

I just bought a home. I got it financed on the Internet. I went to either Excite or to Yahoo and went into Home Mortgages, went into comparison home mortgages, selected the company with the lowest rate, and applied and got my loan with them in a couple of days.

On the Internet. A home mortgage! [*laughs*]

And buying a home traditionally is an even uglier process than buying a car.

I think about all the homes that I've bought traditionally, and I thought I was sophisticated, but here's what happens. You go buy a home and then your broker tells you, "You know, I've got a mortgage banker or mortgage broker that you go to and they'll get it for you." But by the time you got all the points and all the stuff that you went through, the mortgage banker made some money, the broker did, then the other company. They told you, "They're the best company to go to." Why they're the best company to go to is because they all got fees.

You go on the Internet, it's totally transparent. Just as transparent as the auto purchase is. So I think that that's going to be a great place.

Financing of any product is going to be a great place on the Internet. You need to be able to have something that is identified as a commodity on the Internet. Amazon.com can go sell a book because people know what that book is. I think it could be potentially more dangerous to sell a piece of jewelry because there's no branded jewelry. How you're going to bring QVC onto the Internet real well, I don't know.

I think clothing could do it. Polo. Armani. Somebody who's got a name brand recognition could, I think, go on the Internet and change their distribution process, but at great pain because they're liable to destroy their stores, their retail outlets. So I don't know. But someday.

People have asked us if we'll get into boats or motorcycles or stuff like that, and I suppose that if we were kind of piggy, we'd go out there and try to figure out how to do that right now, but we have got such a job to do.

Your plate is kind of full.

Yeah, it's pretty full. We're just going to stick with this. ◆

Copyright © 1998 by Mary Eisenhart and MIcroTimes. *All rights reserved.*

A Comfortable Place to Buy a Custom System Direct from a Silicon Valley Source.

YOUR ONE-STOP COMPUTER SOURCE

Custom-Built Quality Systems

Intel® 350/400 NOW AVAILABLE W/PC-100 MEMORY

SMART 100X IDE CD-ROM **$89** YES! 100 TIMES FASTER

AMD K6-266/300MHz NOW AVAILABLE

Best Customer Service

VALUE SYSTEM

- Mini-Tower Case w/250W PS
- ASUS SP97 PCI 75-233MHz M/B
- 512K L2 Pipeline Burst Cache
- Cyrix MX PR200 CPU
- Ball Bearing CPU Fan & Heatsink
- 8MB EDO RAM, 60ns Memory
- TEAC 1.44MB Floppy Drive
- 420MB EIDE Hard Drive
- 1-4MB PCI SVGA
- 104 Enhanced Keyboard
- PS/2 Mouse
- 14" SVGA Digital Monitor, .28, NI

Cyrix

$449

Cyrix MX PR233 ..... $469
Cyrix MX PR266 ..... $529

VALUE MULTIMEDIA SYSTEM

- Mini-Tower Case w/250W PS
- ASUS SP97 PCI 75-233MHz M/B
- 512K L2 Pipeline Burst Cache
- Cyrix MX PR200 CPU
- Ball Bearing CPU Fan & Heatsink
- 16MB EDO RAM, 60ns Memory
- TEAC 1.44MB Floppy Drive
- 2.1GB EIDE Hard Drive Ultra DMA
- 1-4MB PCI SVGA
- 16X IDE CD-ROM
- Yamah 3D 16-Bit Sound Card
- Deluxe Speakers
- 104 Enhanced Keyboard
- PS/2 Mouse
- 14" SVGA Digital Monitor, .28, NI

Cyrix

$589

Cyrix MX PR233 ..... $609
Cyrix MX PR266 ..... $669

HOME MULTIMEDIA SYSTEM

- Mini-Tower Case w/250W PS
- Intel Triton 430TX 75-233MHz M/B
- 512K L2 Pipeline Burst Cache
- Intel P-133MHz CPU
- Ball Bearing CPU Fan & Heatsink
- 32MB SDRAM, 10ns Memory
- TEAC 1.44MB Floppy Drive
- 3.2GB EIDE Hard Drive Ultra DMA
- S3 Virge 3D 4MB Video
- 16X IDE CD-ROM
- Yamaha 3D 16-Bit Sound Card
- 33.6 Fax/Modem/Voice
- 100-Watt Amplified Speakers
- Mitsumi 104 Keyboard
- Internet PS/2 Net Mouse
- 15" SVGA Digital Monitor, .28

AMD K6 · intel inside · pentium

$769

P-166MHz MMX. $789
P-200MHz MMX. $799
P-233MHz MMX $829
AMD K6-200MHz $779
AMD K6-233MHz $789

PROFESSIONAL MULTIMEDIA SYSTEM

- Mid-Tower ATX w/250W PS
- ASUS TX97 XE Triton TX 75-233MHz M/B
- 512K L2 Pipeline Burst Cache
- Intel P-166 MMX CPU
- Ball Bearing CPU Fan & Heatsink
- 32MB SDRAM 10ns Memory
- TEAC 1.44MB Floppy Drive
- 4.3GB EIDE Ultra DMA Hard Drive
- Diamond Fire GL 1000 PRO AGP 4MB
- 24X IDE CD-ROM
- Sound Blaster 64 AWE
- Diamond Supra 56.6K Fax/Modem/Voice V.90, PCI
- NEC Amplified Speakers
- Keytronics 104 Keyboard
- Microsoft PS/2 Mouse
- 15" SVGA Digital Monitor, .28

AMD K6 · intel inside · pentium

$1049

P-200MHz MMX $1059
P-233MHz MMX $1089
AMD K6-200/233MHz... $1039/1049
AMD K6-266MHz..... $1129
AMD K6-300MHz..... $1219

PENTIUM® II POWER SYSTEM

Mid-Tower ATX w/250W PS
ASUS P2 L97 440LX Motherboard
Intel Pentium® II 233MHz CPU
Ball Bearing CPU Fans & Heatsink
64MB SDRAM Memory 10ns
TEAC 1.44MB Floppy Drive
4.3GB Ultra DMA Hard Drive
Diamond Fire GL 1000 Pro AGP 4MB
Toshiba 32X IDE CD-ROM
Sound Blaster 64 AWE
Diamond Supra 56.6K Fax/Modem/Voice V.90, PCI
NEC Amplified Speakers
Keytronics 104 Keyboard
Microsoft PS/2 Mouse
17" SVGA Monitor, .25 Digital

intel inside · pentium

$1449

INTEL P-II 266MHz..... $1499
INTEL P-II 300MHz..... $1619
INTEL P-II 333MHz..... $1749

PENTIUM® II POWER SCSI SYSTEM

Mid-Tower ATX w/250W PS
ASUS P2 L97-S 440LX Motherboard
On Board Ultra-Wide SCSI Controller
Intel Pentium® II 233MHz CPU
Ball Bearing CPU Fan & Heatsink
64MB SDRAM Memory 10ns
TEAC 1.44MB Floppy Drive
4.3GB Ultra-Wide SCSI Hard Drive
Diamond Fire GL 1000 Pro AGP 4MB
Toshiba 32X SCSI CD-ROM
Sound Blaster 64 AWE
Diamond Supra 56.6K Fax/Modem/Voice V.90, PCI
NEC Amplified Speakers
Keytronics 104 Keyboard
Microsoft PS/2 Mouse
17" SVGA Monitor, .25 Digital

intel inside · pentium

$1699

INTEL P-II 266MHz..... $1749
INTEL P-II 300MHz..... $1869
INTEL P-II 333MHz..... $1999

DUAL PENTIUM® II POWER SCSI SYSTEM

Mid-Tower ATX w/250W PS
ASUS P2L97-DS 440LX Motherboard
Dual Processor on Board
Ultra Wide SCSI
Dual Pentium® II 233MHz CPU
Dual Ball Bearing CPU Fan & Heatsink
128MB SDRAM 10ns
Teac 1.44MB Floppy Drive
Dual 4.3GB Ultra-wide SCSI Hard Drive
Diamond Fire GL 1000 Pro AGP 8MB
Toshiba 32X SCSI CD-ROM
Sound Blaster 64 AWE
Diamond Supra 56.6K Fax/Modem/Voice V.90, PCI
NEC Amplified Speakers
Keytronics 104 Keyboard
Microsoft PS/2 Mouse
17" SVGA Monitor, .25 Digital

intel inside · pentium

$2469

DUAL INTEL P-II 266MHz $2569
DUAL INTEL P-II 300MHz $2809
DUAL INTEL P-II 333MHz $3069

PENTIUM® II DX POWER SYSTEM

Mid-Tower ATX w/250W BX PS
ASUS P2B 440BX Motherboard
Intel Pentium® II 350MHz CPU
Ball Bearing CPU Fan & Heatsink
128HB SDRAM PC100 Memory
Teac 1.44MB Floppy Drive
6.4GB Ultra DMA Hard Drive
Diamond Fire GL1000 Pro AGP 8MB
Sound Blaster 64 AWE
Diamond Supra 56.6K Fax/Modem/Voice V.90, PCI
NEC Amplified Speakers
Keytronics 104 Keyboard
Microsoft PS/2 Mouse
17" SVGA Monitor, .25 Digital
Toshiba 32X IDE CD-ROM

intel inside · pentium

$2179

INTEL P-II 400MHz..... $2379

CONSIDER THESE UPGRADES

- **Operating System – DOS/Windows 3.1, Windows 95, Windows NT**
- **Bundle Softwares – Office 97 Pro, Family, Business, Games & Educational**
- **19" or Larger Monitors**
- **Panasonic LS-120 120MB Floppy Drive**
- **Zip/Jazz Drives**
- **Tape Backup**
- **56.6K X2 or Flex**
- **SCSI Option**
- **Network Card/Hub/Accessories**
- **Video Capture & Conferencing**
- **Quiet & Extra Cool Cases**
- **Internet Hook-Up**
- **DVD**
- **CD Recorders/Rewritables**

OTHER SERVICES

- **System Diagnostics & Repair**
- **Parts & Upgrades**
- **Web Page Design**
- **On-Site Networking Consultants**
- **Hardware & Software Installations**
- **Laser Printer & Monitor Repair Service**

ASUS · CREATIVE · SONY · hp HEWLETT PACKARD · Seagate · matrox · ViewSonic · Quantum · WESTERN DIGITAL · intel · Cyrix · FUJITSU · 3Com · MAG INNOVISION · U.S.Robotics · Designed for Microsoft Windows 95 · Microsoft WindowsNT · DIAMOND · AMD · adaptec

Open Late:
Mon.-Fri. 10-8
Sat. 10-6

ups · FedEx · DISCOVER · VISA · MasterCard · ATM

POs Welcome

MERIDIAN COMPUTER SYSTEMS

1586 Meridian Ave. • San Jose, CA 95125
Phone: 408-979-9084 • Fax: 408-979-9086
http://www.mericomp.com • E-Mail info@mericomp.com

Not responsible for typographical errors. Prices and availability subject to change without notice. All other brands and trademarks are properties of their respective owners.

doing business on the internet

Compare.Net: Smart Shopping Starts Here

Stop By Before You Buy!

By Sara Tassione

Imagine this. A Web site where you can comparison shop anything from software, to the latest car, to some slick new home entertainment system—get non-bias opinions on the products, educate yourself on what features are available, and purchase exactly what you want for the lowest price out there—all online. Imagine, no crazy, commission-driven sales reps, no store hour restrictions and no driving around ripping your hair out, looking for the best available price. Can you imagine it? Well, it exists and it's called Compare.Net (*www.comparenet.com*). A 29 year-old, enthusiastic Trevor Traina and his childhood buddy John Dunning Jr. decided that such a site needed to exist, and so they created it. Now, Compare.Net is 35 employees strong (more than doubling in one year) and "the" leading Internet buyer's guide according to their press materials.

The hip, relaxed office is located in San Francisco's China Basin Building, with a view of the waterfront that anyone would just die for. Ship artwork lines the bottom of the freshly painted walls waiting to decorate the new office, and I am told that the Titanic is not the theme they are going for, but more of a nautical feel. Right away, the easy-going Traina chit-chats about his new SF headquarters, "People work really hard here, but it's a great office environment because the people are all young, we have a softball team, we have beers on Fridays, it's really casual...you can wear whatever you want." He laughs very easily.

Actually he has a lot to be happy about. His company, the still privately-held Compare.Net, is doing very well. Already first round financing by Media Technology Ventures and GE Capital's Equity Capital Group are funding the companies continued growth. Not to mention partnerships with Cendant Corporation's netMarket and AutoVantage sites (for purchasing online), Product ReviewNet (for factual information and opinions on products) and US WEST Yellow Pages (who direct people doing product research to Compare.Net).

They have also linked a partnership with Auto-By-Tel (an online car dealership and our current cover boys), whom Traina admires, seeing the group as "visionaries." He clarifies: "They provide a great service to consumers, but they have also thought through what the businesses need, so they are serving two needs. I think that's really smart."

Things are looking up and even plans of going public—sometime in the next two years—is in the wings for this year and a half young company.

All right, this is all very well. But there are certain questions one, if not myself anyway, has right off the bat. Like, how do they make their revenue... nothing is done for free in this great nation of ours. Money talks. Furthermore, how do they maintain their non-bias stance and of course, what the heck is their secret to such success?

Well all these questions will be answered and many more.

In The Beginning...There Was None

But first things first. Why, with an MBA from UC Berkeley's Haas School of Business, a graduate degree in Political Science from Oxford University and a BA from Princeton University, is Traina doing this? Driven by starting his own company, he began Compare.Net while attending business school. He worked out of his father's house with six other people, fighting over only two phone lines for about four months. Traina didn't take any salary for a year and "racked up a lot of credit card debit," which he has since paid off.

The idea for Compare.Net came about one day when a business partner broke Traina's cordless phone. "So I ran to a store on Geary St. and I went over and looked at this huge shelf of products and I had no idea why one was better that the other." A problem many of us can relate too. "The salesman were just trying to sell me whatever was in stock. I thought, 'No store carries every single brand but I want my information before I make a decision. So I looked on the Internet for product information and there was just nothing. There was no way to compare products, so I thought, 'Oh my God, I think this is my idea right here." And that's that.

> "We deal in 'price' and 'features,'" says Traina, "So it's objective information rather than subjective. We never take a bias, in our editorial or anything."

Your Membership Card, Please

As far as making a living from it, some real strategy had to be put into the business model. How could they make money from manufacturers, yet still maintain their integrity? They decided to sell "memberships," which basically offer, for a reasonable price, advertorials—a custom-built page (including vendor supplied info) with pictures of the product and text—rather than the free "check marks" page available to all manufacturers. Another perk to membership includes valuable data-mining information compiled daily from Web site visitor preferences.

continued on page 123

Thank You for Your Overwhelming Support. We Are Pleased to Extend Our Series of

SUPER SYSTEMS • SUPER DEALS

Intel P2 Motherboards

Seattle SE440BX $196

Atlanta AL440LX $143

MU443EX Call

Intel TX430 Chipset

Motherboard - UDMA/33 $79

Adaptec 2940U $140

Adaptec 2940UW $155

Western Digital 9.1GB

Ultra Wide SCSI $699

NOTEBOOK SPECIALS

Hitachi

Visionbook Plus P166MMX, 16MB, 2.1GB, 12.2 DSCAN, 20x, 56K, W 95 $1795

Visionbook Plus P233MMX, 32MB, 4.2GB, 13.3 TFT, 20xCD, 56K, W 95 $3675

Visionbook Pro P266MMX, 48MB, 4.0GB, 13.3 TFT, 20x, 56K USR, W 95 $4395

Fujitsu

Lifebook 655TX P150MMX, 16MB, 1.3GB, 12.1 TFT, 33.6K, W 95 $1840

Lifebook 675TX P200MMX, 32MB, 3.2GB, 12.1 TFT, 56K, W 95 $3680

Lifebook 985TX P233MMX, 32MB, 5.0GB, 13.3 TFT, 20xCD, 56K , W 95 $4360

Toshiba

Satellite Pro 460CDX P166MMX, 32MB, 2.0GB, 12.1 DSCAN, 10xCD, W 95 $1780

Satellite Pro 740CDT P166MMX, 16MB, 3.0GB, 13.3 TFT, 10xCD, W 95 $2890

Satellite Pro 470CDT P200MMX, 32MB, 2.0GB, 12.1 TFT, 10xCD, W 95 $2995

Satellite Pro 480CDT P233MMX, 32MB, 3.8GB, 12.1 TFT, 10xCD, W 95 $3480

Satellite Pro 750CDT P233MMX, 32MB, 4.7GB, 13.3 TFT, 20xCD, 33.6K, W 95 $5190

New Pentium II

400MMX™

w/ 17" Monitor, 8MB AGP Graphics
64MB SDRAM, 32x CD ROM
6.4GB UDMA/33 HD, Multimedia Kit

$2195

350MHz - $1995

333MHz $1695

300MHz $1595

266MHz $1495

233MHz $1395

- Intel Pentium® II Processor w/ 3 Year Warranty
- 64MB SDRAM RAM, 60ns
- 6.4GB UltraDMA/33 Hard Drive
- 1.44MB Floppy Drive
- 17" .28dp 1280x1024 Monitor
- 8MB AGP Graphics Card
- 32x CD ROM Drive
- 3D Stereo OPL3 Sound Card
- 60Watt Multimedia Speakers • PS/2 Mouse
- 104-Key Keyboard • Multimedia Microphone
- Deluxe Dual Fan ATX Case
- MS Windows 95 CD OSR 2.5
- All items brand new w/ Manufacturer's Warranty
- Three Year Warranty on Monitor
- One Year System Warranty

COMPLETE PENTIUM® MMX SYSTEMS

200MMX™ $895 233MMX™ $945

32MB RAM, 2MB PCI Video, 3.2GB UltraDMA/33 HD, 15" Monitor
Yamaha 3D Stereo Sound, 60W Speakers, 104 Keyboard, Mouse
Microphone, 32x CD ROM, MS Windows 95 CD, Multimedia Kit

Iomega ZIP Drive

$84

3COM 3C905TX 10/100

$58

56K Fax PCI Modem

$80

SOFTWARE

Windows NT 4.0 w/Internet Exp. $185
NT 4.0 Server w/5user Lic. OEM $695
NT Server 4.0 w/10user Lic. $990
Lotus Smartsuite 97 OEM w/man. $135
Corel Wordperf. Suite 8 OEM w/man. $145
Norton AntiVirus 4.0 OEM $22
Microsoft Home Bundle $55
Encarta 98, Works & Money, Golf, Cinemania 97, 3D Movie Maker, CD Sampler

NOVELL

Internet for Small Business
1 Add./ 5 Add. License ..... $59 / $220
Small Office Pack $395

IntranetWare Full Versions
5 User / 10 User ..... $690 / $1290
25 User / 50 User ..... $2090 / $2890
100 User / 250 User ..... $3990 / $7290
500 User $15,990

NetWare Upgrades: Any
5 to 5 / 5 to 10 ..... $325 / $1175
10 to 10 / 10 to 25 ..... $595/ $1365
10 to 50 / 25 to 25 ..... $2170 / $955
25 to 50 / 25 to 100 ..... $1725 / $2955
50 to 50 / 50 to 100 ..... $1260 / $2480
100-100 / 100-250 ..... $1730 / $5140
250 to 250 ..... $3075

Groupwise 5.2
5 User / 10 User ..... $435 / $875
25 user / 50 User ..... $2170 / $4155
100 User $8080

Groupwise Upgrades
5 User / 10 User ..... $185 / $365
25 user / 50 User ..... $870 / $1725
100 User $3290

510-623-9125
408-263-9127

newriver
a division of USMACH
43102 Christy St. Fremont, CA 94538

650-952-5887
650-952-5886

Fax: 510-623-9145
61A Airport Blvd., So. San Francisco, CA 94080
Email: newriver@usmach.com

Price & availability subject to change. Not responsible for typographical errors. Pentium® & MMX™ are registered trademarks of Intel Corp. All other trademarks & logos are the property of their respective owners

Credit Card Purchases Not Accepted For

AMT INTERNATIONAL

2030 FORTUNE DRIVE, SAN JOSE, CA 95131
TEL (408) 432-1790 FAX (408) 944-9801

Email: amti@hooked.net
www.kode.net.~amti

LOWEST PRICES SAME DAY SHIPPING

CREDIT CARD ACCEPTED WALK-IN CUSTOMERS ONLY

QUANTITY PRICING FOR DEALERS & VARS, PLEASE CALL!!

INTEL MICROPROCESSORS

- P-II Klamath 450 MHz — CALL
- P-II Klamath 400 MHz — CALL
- P-II Klamath 350 MHz — CALL
- P-II Klamath 333 MHz — CALL
- P-II Klamath 300 MHz — CALL
- P-II Klamath 266 MHz — CALL
- P-II Klamath 233 MHz — CALL
- Pentium Pro 200 w/512K Cache — CALL
- Pentium Pro 200 w/256K Cache — CALL
- Pentium Pro 180 MHz w/256K Cache — CALL
- Pentium Pro 150 MHz w/256K Cache — CALL
- Pentium 233 MMX — CALL
- Pentium 200 MMX — CALL
- Pentium 200 MHz — CALL
- Pentium 180 MHz — CALL
- Pentium 166 MMX — CALL
- Pentium 166 MHz — CALL
- Pentium 150 MHz — CALL
- Pentium 133 MHz — CALL
- Pentium 100/120 MHz — CALL
- Pentium 60/75/90 MHz — CALL
- 486DX4-100 MHz — CALL
- 80486DX2-66 MHz — CALL

IBM CPU CHIPS

- 686-200+MHz — CALL
- 686-133MHz (+166) — CALL
- 686-120MHz (+150) — CALL
- 686-110MHz — CALL

A.M.D. CPU CHIPS

- K6 300 MHz(Pent Comp) — CALL
- K6 266 MHz(Pent Comp) — CALL
- K6 233 MHz(Pent Comp) — CALL
- K6 200 MHz(Pent Comp) — CALL
- K6 166 MHz(Pent Comp) — CALL
- K5 200/233 MHz(Pent Comp) — CALL
- K5 166 MHz(Pent Comp) — CALL
- K5 166 MHz(Pent Comp) — CALL
- K5 133 MHz(Pent Comp) — CALL
- K5 120 MHz(Pent Comp) — CALL
- K100 MHz(Pent Comp) — CALL
- K90 MHz(Pent Comp) — CALL

CYRIX CPU CHIPS

- MMX 233 MHz — CALL
- MMX 200 MHz — CALL
- MMX 166 MHz — CALL
- 686-150 MHz (+200) — CALL
- 686-133 MHz (+166) — CALL
- 686-120 MHz — CALL
- 686-110 MHz — CALL
- 686-100 MHz — CALL
- CX 486DX2-66 MHz 5V — CALL
- 586-100/120 MHz — CALL
- CX 486DX2-80 MHz 5V — CALL
- CX 486DX2-80 3V — CALL

MEMORY UPGRADES - DUE TO THE RAPIDLY CHANGING PRICES CALL FOR THE LATEST PRICES!
HARD DRIVES AVAILABLE FOR CHEAPEST PRICES

SIMMS

30 PIN AVAILABLE
CALL FOR LOWEST PRICES

1x3-70	1x9-80
1x3-60	4x3-70
1x3-80	4x9-60
1x9-70	4x9-60
1x9-60	4x9-80

72 PIN NON-PARITY

1x32	4 MB
2x32	8 MB
4x32	16 MB
8x32	32 MB

72 PIN WITH PARITY

1x36	4 MB
2x36	8 MB
4x36	16 MB
8x36	32 MB
16x36	36 MB

72 PIN EDOs

1x32	4 MB
2x32	8 MB
4x32	16 MB
8x32	32 MB
16x32	32 MB

DIMMs

8 MB 16 MB 32 MB 64MB 128MB
512K Oblique 256K
All Tyes Of Dimms Available
Biplane Burst Available

Call For Best Prices

DRAMS

DRAMS

- 256x1-80 — $2
- 256x1-100 — 2
- 256x1-120 — 2
- 256x4-60/70/80 — 3.99
- 64x4-80/100 — 4
- 1x4-80 DIPP — 35
- 1MBx1-70 — 5.99
- 1MBx1-80/60 — 5.99
- SOJ — 19

ZIPPS

- 64x4-10/12 Page, 18pin — $4.50
- 256x4-80/70 Page, 20pin — 4.50
- 256x4 Video Page 28pin TC524256Z — 7
- 256x4 Video 28pin TC5242567 — 7.50
- 1x4-80/70 Page 20pin ZIP — 20
- 1x4-80/70 Page 20pin DIP — 22

CACHE MEMORY

- 32Kx8-20 — $4.50
- 32Kx8-15/12 — 5
- 64x4-20 — 5
- 64x4-15 — 3.50
- 64x8-15/20 — 2.75
- 8Kx8-20 — 2
- 8Kx8-15 — 2
- 16Kx4-20 — 2.50
- 16Kx4-15 — 2.50
- 64x1-20 — 4.75
- 64x1-15 — 5
- 128x8-20 — 19
- 128x8-25 — 16

MATH CO's

INTEL/CYRIX/ULSI

- 287-10 — $29
- 8087-1/2/3 — 84/67/54
- 287XL Intel Tube — 44
- 387SL Intel Tube — 44
- 387SX-26/20/33 — 44
- 387SX-25 Cyrix — 35
- 387SX-33 ULSI — 29
- 387DX-20 Intel Tube — 31
- 387DX-25 Intel Tube — 30
- 387DX-33 Intel Tube — 40
- 387DX-40 Cyrix/IIT — 34
- 4167-25/33 Weitek — 195/375

CALL FOR PRICING ON IIT, ULSI &

LASER PRINTER MEMORY UPGRADES

IBM LASER
EPSON LASER
HP LASER
PANASONIC LASER
OKI LASER
QMS LASER
SHARP LASER
PACKARD BELL
NEC
FACIT
FUJI
TEC
BROTHER
STAR
LEXMARK
TEKTRONIC
KYOCERA
AND ALL OTHERS

Call for
SUN SPARC STATIONS, TEXAS INSTRUMENTS, ZENITH MEMORY & PCMCIA CARDS PRICING & INFO!

MEMORY BOARDS

- RAMpAT 16 Bit — $85
- RAMpAT Plus — $125
- SIMMply RAM for PS/1 16 Bit — 149
- SIMMply RAM — 159

TEAC FLOPPY DRIVES

- 1.44 MB — $39
- 1.2 MB — 49
- Dual Floppy 1.2/1.44 — 98
- Heat Sink w/Fan For 486's/Pentium — 10/18

MEMORY UPGRADES FOR DESKTOPS & LAPTOPS

Acer, Apple, AST Computer, AT&T, Canon, Compaq, DEC, CTX (Making Technology Affordable), Dell, Epson, Everex (EVER for EXcellence), Fujitsu, HP Hewlett Packard, IBM, NCR, NEC, Packard Bell, Panasonic Office Automation, Sharp, Silicon Graphics, Sun microsystems, Texas Instruments, Toshiba, Twinhead, Zenith

www.kode.net.~amti

CALL FOR UPGRADING OF PRINTERS & OTHER SYSTEMS
ALL MODELS/ALL MAKES

TERMS AND CONDITIONS

1. Gov't, University and Qualified Firms PO'S Welcome
2. U.S. and International Shipping VIA UPS, DHL and Federal Express
3. All Sales Must Include Sales Tax
4. All Sales Must Be C.O.D. Cashier/Certified Checks

(Pentium® is a registered trademark of Intel)

5. There Is a 15% Restocking Charge For All Refused Merchandise
6. Prices Subject To Change W/O Notice, Not Responsible For Typo's
7. Call For Latest Prices
8. 30 Day Warranty on 486 CPU's Call For Pentium Warranty

HOURS: MON-FRI 9am - 5pm

Your Computer Service Provider Since 1990

On-Site Service for Your Home or Business. We Offer You Custom System Configuration.
Complete Upgrade & Repair Center. Corp., Govt., School, & Special Orders Welcome!

Pentium® Special

Intel Pentium® 166Mhz MMX CPU
512K Pipeline Cache • 2MB Graphics Accelerator
32MB EDO SIMMs • 2.1GB EIDE Hard Disk Drive
1.44MB Floppy Drive • 24X IDE CD-Rom
3D Sound Card • Minitower Case 230watt.
Mitsumi Win95 Keyboard
2 Button Mouse
33.6k Fax Modem

**** $499.00 ****

Pentium 200 MMX $559
AMD K6 233 MMX $549
Cyrix M2 200 MMX. $499

OFFICE SYSTEM

Intel Pentium® MMX CPU
Mini-tower Case 230watt
512K Cache Motherboard
S3 2MB PCI Graphics Accelerator
32MB 168pin 10ns SDRAM DIMM
4.3Gb Maxtor Diamond Max Ultra DMA IDE
IO Mega ZIP Drive • Creative 24X CD-ROM Drive
1.44MB Floppy Drive • US Robotics 56K Modem
Mitsumi 104 Keyboard • Logitech Mouse
Windows 95 OSR2 CD • 14" SVGA Monitor Included

Intel 233 MMX $899
Intel 200 MMX $849
AMD K6 233 . . . . . $849

Get the Best ASUS Motherboard

We proudly carry the complete line of ASUS Products. For complete information call us or visit www.asus.com

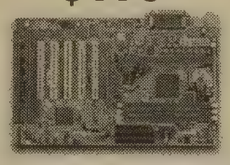
ASUS 440BX w/100MHz Bus

Intel 440BX AGP set w/100MHz Bus Motherboard

100MHz Bus Improves Processing Speed

Handles up to 400MHz Processor

$179



Pentium® II Value 2000 SYSTEM

Intel 440LX Chipset Motherboard
Intel Pentium® II-512K MMX CPU
ATX Chassis with 2nd Fan
32MB 168pin 10ns SyncDRAM DIMM
S3 Virge GX2 AGP 4MB Video Card
6.4GB Quantum SE Ultra DMA IDE
1.44MB Floppy Drive • Creative 24X CD-ROM Drive
Yamaha 3D Sound Card • US Robotics 56K Fax Modem
QIC 8860 Speakers 120Watt • Mitsumi PS-2 Keyboard
Logitech PS-2 Mouse • Windows 95 OSR2 CD • Monitor not Included

Pentium® II-233/266/300Mhz . . . . $ 999/1059/1149

Pentium® II Expert System

Intel 440BX Chipset Motherboard
Intel Pentium® II-512kb MMX CPU
ATX Chassis with 2nd Fan
64mb 168pin 10ns SDRAM DIMM
ATI Expert@Work AGP 4MB
8.4GB Quantum FireBall SE Ultra DMA IDE
1.44MB Floppy Drive • Toshiba 32X CD-ROM Drive
Sound Blaster AWE 64 Value • US Robotics 56K Modem
Mitsumi PS-2 Keyboard • Logitech PS-2 Mouse
QIC 8860 Speakers 120W • Windows 95 OSR2 CD
Monitor not Included

Pentium® II-266/300 MHz. $1299/1399
Pentium® II-333/400 MHz. $1549/1899

Motherboards

1. Pentium® TX-Pro 512K Cache $59
1. w/ 6x86MX P200 CPU $129
2. ASUS SP97 512K with Video on Board $80
3. ASUS TX97L 512K $109
4. ASUS P2BX100 . . . . . $175
5. ASUS P2L97S UWSCSI on Board $249
6. ASUS P2L97DS Dual CPU/UWSCSI $399
7. ABIT BX6 440BX Jumperless $159
8. INTEL DK440LX w/ SCSI $499
9. INTEL N440BX $599
10. SOLTEK 512K W/ K6-233 CPU AGP $188

Hard Drives

11. Quantum SE UDMA IDE 6.4GB. $259
12. Quantum SE UDMA IDE 6.4GB $199
13. Fujitsu UDMA IDE 4.3GB $169
14. WD UDMA IDE . . . . . CALL
15. WD UDMA 4.3GB $169
16. Fujitsu UDMA IDE 3.2GB $149
17. Maxtor UDMA IDE 2.1B $129
18. Seagate UDMA IDE 2.1GB $129
19. Quantum Atlas II UWSCSI 9.1GB. $689
20. W.D. Enterprise UWSCSI 9.1GB $799
21. W.D. SCSI Drives . . . . . CALL
22. W.D. Enterprise UWSCSI 4.3GB $449

Video Cards

23. Diamond Viper V330 AGP 4MB $115
24. Diamond Monster II 3D 8MB $195
25. Diamond Stealth 3D 2000 2MB. $45
26. S3 Trio64V+ PCI 2MB EDO. $35
27. Matrox Millennium II 8MB $209
28. Matrox Productiva G100 8mb AGP $95
29. ATI Xpert @ Play AGP 4MB $159
30. S3 GX2 AGP 4MB. $59
31. ATI All-in-Wonder Pro 8MB $199
32. #9 Reality AGP 4mb. $75
33. INTEL 740 AGP 8MB. $89

Monitors

34. 17" Viewsonic GT775 .25 1280x1024 . . . . . $559
35. 17" Viewsonic G773 .26 1280x1024 . . . . . $489
36. 17"Viewsonic G771 .27 1280x1024 . . . . . $439
37. 17"Viewsonic E771 .28 1280x1025 . . . . . $399
38. 21"Viewsonic P810 .25 1600x1280 . . . . . $999
39. 17" Sampo AlphaScan .26 1280x1024 . . . . . $399
40. 17"DIGIview 1707+ .28 1280x1024 . . . . . $299
41. 15" DIGIview 1510 .28 1280x1024 . . . . . $199
42. 14" DIGIview 1435 .28 1024x768 . . . . . $149

Modems

43. US Robotics 56K (OEM)Voice/Int. . . . . $79/$99
44. US Robotics 56K V.90 . . . . . $149
45. US Robotics 56K Ext $189
46. Creative Modem Blaster 56K Flash . . . . . $ 89
47. Supra Express 56KModem. $89

Miscellaneous

48. ATX Full Tower 300Watt 2 Fan $119
49. ATX Medium Tower w/235Watt P.S $69
50. Mini Tower Case 230Watt P.S $30
51. ASUS Elan Vital SMART Fan $15
52. Cooler Master K6 Fan 233 . . . . . $20
53. Elan Vital P2 CPU Fan $15
54. Ball Bearing Chassis Fan $10

CPU & Memory

55. 16MB 72pin 4x32-60ns EDO $20
56. 32MB 168pin 4x64-10ns SDRAM $50
57. 64MB 168pin 8x64-10ns SDRAM. $109
58. 128MB 168pin 16x64 3.3V SDRAM $218
59. Pentium® II CPU 233/266/300/400MHz . $199$259/359/799
60. Cyrix/IBM 6x86 MX2-200/233 CPU $69/89
61. AMD K6 CPU 233/266MHz $99/185

CD-ROM & Sound Cards

62. Creative 24x IDE CD-ROM $69
63. Toshiba 24x IDE CD-ROM $69
64. Mitsumi 2x8 CD-R $299
65. Toshiba 32x IDE CD-ROM $89
66. Toshiba 32x SCSI CD-ROM $99
67. Sound Blaster 64AWE Gold $169
68. Sound Blaster 64AWE Value $79
69. Sound Blaster 16PnP $39
70. Yamaha OPL3 3D Sound $15
71. QIC 8880 Speakers 160Watt $25
72. QIC 8860 Speakers 120Watt $19

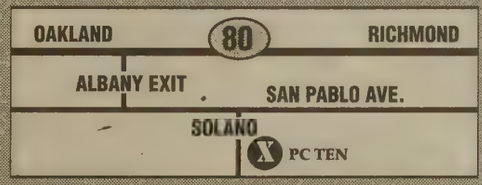
PCTEN INC.

PIEDMONT COMPUTER SINCE 1990

Not responsible for typographical errors. Prices subject to change without notice.

Main Office:
Oakland • Piedmont
4237 Piedmont Avenue
510-652-5268
Fax: 510-652-5380

Albany • Berkeley
1533 Solano Ave.
510-527-1388
Fax: 510-527-7006



YOUR ONE STOP

Systems & Motherboards

PENTIUM® II
400/350
Intel M/B (With Sound) 440BX Chipset
$1318/$1088
MOTHERBOARD/1CPU
$1138/$908

PENTIUM® II
400/350
Microstar M/B 440BX Chipset
$1288/$1058
MOTHERBOARD/CPU
$1108/$878

PENTIUM® II
333/300/266/233
Intel Dual CPU M/B
(with 1 CPU)
$1238/$1088/$948/$908
MOTHERBOARD/1CPU
$1088/$938/$798/$748

PENTIUM® II
333/300/266/233
Intel Motherboard (No Sound Card)
440LX Chipset
$888/$738/$608/$558
MOTHERBOARD/CPU
$738/$588/$448/$398

PENTIUM® II
333/300/266/233
Microstar Dual CPU Motherboard
(with 1 CPU)
440LX
$918/$768/$638/$588
MOTHERBOARD/CPU
$758/$608/$478/$428

PENTIUM® II
333/300/266/233
Microstar Motherboard
440LX Chipset
$858/$718/$578/$528
MOTHERBOARD/CPU
$708/$558/$418/$368

PENTIUM®
133/166/200MMX/233MMX
PCI
INTEL ANCHORAGE M/B (OEM)
$338/$348/$368/$398
MOTHERBOARD/CPU
$198/$208/$228/$258

PENTIUM®
133/166/200MMX/233MMX
PCI
512K PIPED BURST CACHE
$288/$298/$328/$348
MOTHERBOARD/CPU
$168/$178/$198/$228

AMD K6-200/233
PCI
TRITON CHIPSET
512K PIPED BURST CACHE
$298/$308
MOTHERBOARD/CPU
$168/$188

BASIC SYSTEM CONFIGURATION

- 32MB RAM 440BX, 440LX M/B
- 8MB RAM Expandable
- IDE 2FD/4HD Controller
- 101-Key Keytronic Keyboard
- Teac 1.44MB Floppy Drive
- 1 Parallel, 2 Serial Ports
- Mini Tower Case (Pentium® Pro, Pentium® II, Anchorage & Lonetree: Uses ATX Mid Tower Case)
- Power Supply
- One Year Warranty

LIFETIME LABOR WARRANTY ON SYSTEM!

MULTIMEDIA COMPLETE SYSTEM w/16X SPEED CD ROM

PACKAGE INCLUDES:

- Motherboard w/512K Cache
- 32 MB RAM
- 3.2GB Hard Drive (Fujitsu)
- Mini Tower Case
- 16X IDE CD-ROM (Funai)
- Sound Blaster 16 OEM Soundcard
- Teac 1.44MB Floppy Drive
- 14" SVGA 1024x768 .28mm NI Color Monitor
- SVGA Card w/1MB (Trident Chipset)
- IDE Enhanced Controller (2S/1P/1G)
- 101 Keyboard
- 25W Speakers
- Microsoft Compatible Mouse
- Windows 95 Software

CALL FOR OTHER CONFIGURATIONS & OPTIONS

K6 200MHz (AMD) (PCI) $808
PENTIUM® 133MHz (PCI) $798
PENTIUM® 200MHz MMX (PCI)..... $838
PENTIUM® II 233MHz $1018

Peripherals

VIDEO CARDS

ATI 3D Pro 8MB (OEM) $129
ATI 3D Xpression+ 4MB DRAM PC2TV (OEM) 99
ATI 3D Pro 4MB OEM 99
ATI Expert@Play AGP 4MB/8MB 149/179
ATI Expert@Work AGP 4MB/8MB 109/129
Diamond Stealth 64 2MB VRAM PCI 85
2MB Upgrade for Above 59
Diamond Stealth 64 2MB VRAM PCI 85
Diamond 3D Monster 4MB PCI/OEM 149
Diamond 3D Monster 2 (OEM) 229
Diamond 3D 2MB/4MB DRAM 59/79
Diamond 3D 4000 4MB AGP (OEM) 79
Diamond Viper V330 4MB AGP/PCI (OEM) 119/119
Diamond GL1000
4MB PCI/8MB 129/165
4MB AGP/8MB AGP 149/185
Diamond Stealth II 4MB (OEM) 105
Matrox Millennium II 1600x1200
4/8MB WRAM PCI (OEM) 135/195
Matrox G-100 8GB AGP 95
Matrox Mystique 220 2/4MB (Retail) 109/139
Matrox Mystique Rainbow Runner 199
Matrox Mystique 2 MB Upgrade 59
Matrox M3D (3D Upgrade) 99
Achme 4MB AGP 59
Trident PCI 1MB (64 Bit MPEG) 39
Trident Chipset 4MB AGP/AGP+TV 65/75
VGA (1024x768) 1MB ISA 45

DRIVE CONTROLLERS

IDE Controller $17
KW557 IDE ISA 2S/1P 39
Adaptec 2940 SCSI PCI (Bus Mastering) (OEM) 159
Adaptec 2940 ULTRA SCSI PCI (OEM) 169
Adaptec 2940UW Ultra Wide SCSI (OEM) 199
Adaptec 3940 PCI Multi-Channel (OEM) 399
Diamond Firepor' Ultra Wide SCSI 139
Promise EIDE 2300 Plus 4HD/2S (16550)/1P 49
Promise EIDE MAX IDE 32

I/O CARDS

AT-I/O (2S/1P/1G) $15
Printer Card 12

KEYBOARDS

Microsoft Natural Keyboard $49
Keytronic 101 Win 95/Mitsumi 104 Keyboard 29/19

MONITORS

IIYAMA (IDEK)
MF8515G 15" .28 $249
MF8617E 17" .26 495
S901GT 19" 765
MF9017E 17" .25 579
A-102GT 21" 1165
S-102GT 21" 1800X1440 1165
NANAO
FX-C5 17"/FX-C6 17" .27, 1280X1024 675/815
TX-C7/TX-D7S 17" .25, 1600X1200 879/1695
FX-E8 21" .26, 1600X1200 2275
VIEWSONIC
P810 21" 1600x1280 .26 1265
P815 21" 1800x1440 1395
G800 20" 1600x1280 .28NI 995
P775 17" 1600x1200 .25 559
G771 17" 1280x1024 .27NI 455
15GA 15" 1280x1024 NI (Speaker built-in) 355
E641 14" Non-Int 185
9" Mono VGA 119
15" MAXTECH (2 Yr. Warr.) 209
RELYSIS
14" 1024x768 .28 139
15" 1280x1024/17" .26 189/339
NEC Monitors CALL
PANASONIC S70 (17") 1024x768 .28 435
SONY
CPD 100ES/CPD 200ES 319/569
CPD 20SE II Sale 1250
NOKIA
447ZA (17") 1024x1024 .28 (w/Spk) 569
447X 689
445Xi (21") 1600x1280 1425

MODEMS & FAX/MODEMS

Megahertz PCMCIA Fax/Modem (36.6/14.4) $189
US ROBOTICS SPORTSTER
33.6 Fax Modem Int w/Speaker Phone/
Voice Mail (Item #1171) Reg./OEM 129/95
33.6 Fax/Modem Int/Ext 109/119
PCMCIA 33.6 Fax/Modem/56K 179/215
33.6 Fax/Modem OEM 85
56K Fax/Modem Int./Ext. 149/165
56K Fax/Modem w/Voice Int./Ext. 169/185
56K Fax/Modem w/Voice (OEM) 125
56K Fax/Modem Internal (OEM) 109
V.90 56K Fax/Mod (OEM)/Ext 135/175
SUPRAEXPRESS
33.6 Fax/Modem w/ Voice Mail Int. 65
56K Fax/Modem 85
PCI 56K Fax/Mod 79
MODULATOR 33.6 Fax/Modem 49
JATON 56K Fax/Modem/Voice 79

TAPE BACKUP

HEWLETT PACKARD
C1534 4mm DAT 2GB SCSI INT $549
C1 536 4mm DAT 2-4GB SCSI INT 595
C1599 4mm DAT 8GB SCSI INT 695
5.25" Mounting Frame 28
COLORADO
3.2GB T3000 (w/1 Tape) 179
4GB T4000 SCSI TRAVAN INT 375
Travan (800MB)/Travan 3200 Tape 27.95/29
IOMEGA ZIP Drive 100MB SCSI/Parallel 149/135
ZIP Drive 100MB IDE/ZIP+ 95/189
Ditto 3200MB Int/Ext 235/259
JAZ Int/Ext 265/289
JAZ 2GB Int/Ext 509/595
JAZ Disk/Zip Disk 85/12.50

DISK DRIVES

All HDs Come with Mounting Bracket

TEAC 1.2MB $43
3.5" (1.44MB) w/Frame 31
MAXTOR
4.3/8GB UDMA IDE 179/299
FUJITSU
3.2GB IDE Ultra DMA 155
4.3/6.4GB IDE Ultra DMA IDE 175/229
WESTERN DIGITAL
WDAC 32500 2.5GB IDE 149
WDAC 33200 Ultra DMA (3GB)) 159
WDAC 34300 Ultra DMA (4GB) 185
WDAC 36400 Ultra DMA (6GB)) 249
SEAGATE, QUANTUM LARGER CAPACITY DRIVES CALL
QUANTUM
2/6GB SCSI 219/369
3GB Ultra DMA IDE 159

NETWORK CARDS

Ethernet Combo PCI $25
Ethernet Combo 16 Bit (Celan) Plug N Play 29
Ethernet 10/100MB PCI 35
3 COM
3C509 TP/OEM/Reg 49/118
3C509 Combo OEM/Reg 69/129
3C589TP (PCMCIA)/Combo 139/165
3C900 Combo PCI OEM/Reg 85/135
3C900TP OEM/REG 85/115
3C575TX 10/100 PCMCIA Card 155
3C905TX (100MB) PCI TP/OEM/Single 75/109
Intel EtherExpress Pro (100MB) PILA 8460
Single/5 Pack 59/425
Intel EtherExpress Pro 8220TP Single/5 Pack 99/395
5/8/16 Port Hub 39/59/99

U.P.S.

650 VA/1400VA $155/295

COMPUTER CASE

17" Baby AT Case W/200W P/S $69
Vertical Case 250W P/S 99
Medium Vertical Case 250W P/S 85
Mini Vertical Case 250W P/S (UL P/S) 59
Mini-Mid Case/ATX Desktop Case 45/89
ATX Medium/Full Tower Case 85/105

POINTING DEVICES

PC Joystick $16
Logitech 2-button PS/2 Mouse 15
Logitech Cordless Mouse 55
Logitech Bus Mouseman 64
Logitech Mouseman Combo/OEM 49/24
Logitech Trackman Marble/OEM 85/43
Mouse (Serial 9 Pin) 9
Mircrosoft PS2 Mouse (OEM) 29
Microsoft Mouse Bus/Ser (400dpi) 85/75
Microsoft Mouse Grey Ser (OEM) 29
Mircrosoft IntelliMouse/OEM 69/35

MISCELLANEOUS

Windows 95 Release 2, CD/Disk w/System
Purchase Only $99/109
Windows For Workgroups
(w/System purchase only) 56
McAfee Virus Scan Deluxe 66
MS DOS 6.2 (w/System only) 45
6/10/15/25' printer cable 3.50/6/10/20
Keyboard Extension cable 5
Monitor Extension cable 5
Power Center 18
Printer switch box (AB/ABCD) 9.50/19
Printer switch box auto (AB/ABCD) 18/35
Power supply 250W 48
Memory Chips (DIPS/DIMMS/SIMMS) CALL
Power Strip 7

PRINTERS

HP PRINTERS $CALL

SCANNERS

IMAGER 730 30-Bit Parallel Port $119

AROMA computer systems
Always Ready to Offer More Assistance

YOUR ONE STOP MULTIMEDIA SOURCE

Peripherals

- PANASONIC 24X IDE CD-ROM INTERNAL $75
- TEAC 16X SCSI CD-ROM. 89
- FUNAI 16X IDE CD-ROM INTERNAL 65
- TOSHIBA 32X SCSI CD-ROM INT 105
- TOSHIBA IDE CD-ROM INTERNAL 24X/32X . . . 75/85
- TEAC IDE CD-ROM INTERNAL 24X/32X. 75/85
- RICOH MP6200-S 6X2 CD-RECORDER INTERNAL . 539
- MICROPHONE. 9
- DIAMOND IDE DVD 285
- ART MEDIA CD-WRITER INTERNAL. $315

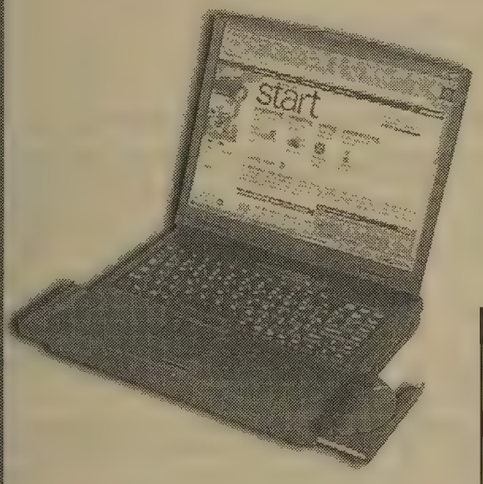
Multimedia Products

- SOUND BLASTER AWE 64 Gold $145
- SOUND BLASTER AWE 64 OEM 75
- SOUND BLASTER PRO 16 BASIC IDE (OEM) 49
- YAMAHA CHIPSET 16-Bit Sound Card 25
- SOUND CARD (PCI) BUS 39
- SPEAKERS
  4W/25W/3D 420W/3D 500W 7.99/30/49/69
- ALTEC LANSING 400 SPEAKERS W/SUBWOOFER 159
- YAMAHA YST-M15 SPEAKERS 69
- WRITABLE CD DISKETTE . . . . . .3.59 EA.

Aroma Highest Quality Pentium Notebooks

NEW!

MMX Technology Notebook



UPGRADES:

- PCMCIA 33.6 Fax/Modem. . . $79
- PCMCIA 56K Fax/Modem . . $109
- Upgrade to 32MB . . . . . +65
- Upgrade to 48MB . . . . . +105
- Upgrade to 80MB . . . . . +195
- 2.0GB . . . . . +75
- 3.0GB . . . . . +125
- 4.0GB (for Model 758). . +295
- 5.0GB (for Model 758). . +509
- Removable HDD Kit . . . . . +29
- Lithium Ion Battery. . . . . +175

STANDARD FEATURES:

- Supports Intel Pentium® MMX Technology
- Built-in 16X CD-ROM
- 1.44MB Floppy Drive
- 1.1GB Hard Drive
- 2MB Video Display
- 4MB Video Display (Model 758/759)
- Lithium-Ion Battery
- Removable Hard Drive
- 800x600 Resolution
- 16MB EDO RAM On-Board (Exp to 80MB)/ (Exp to 128MB for Model 758)
- Two PCMCIA Type II or One Type III Slots
- Touchpad Pointer
- 1-Year On-Site Service

DISPLAY/SPEED	133MHz	166MMX	200MMX	233MMX
12.1" ACTIVE MATRIX	$1508	1538	1538	N/A
12.1" DUAL SCAN	$1318	1358	1358	N/A
Model 758				
12.1" ACTIVE MATRIX SVGA .20X CD-ROM USB Ports	$1798	1828	1828	1858
13.3" DUAL SCAN XGA .20X CD-ROM USB Ports	$1428	1458	1458	1488
14.2" ACTIVE MATRIX XGA .20X CD-ROM USB Ports	$2358	2388	2388	2418
Model 759				
13.3" DUAL SCAN XGA .24X CD-ROM, 2GB HD	$2138	2168	2168	2198
14.2" ACTIVE MATRIX XGA .24X CD-ROM, 2GB HD	$2278	2308	2308	2328

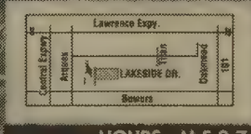
CD TITLES SPECIAL

New Reductions on Most CD Titles

PLEASE CHECK OUR CLEARANCE BOXES
CD TITLE BLOWOUT SALE FROM $3.50

Always Ready to Offer More Assistance

AROMA Computer Systems



470 LAKESIDE DR., Suite F
SUNNYVALE, CA 94086
Tel: (408) 736-4355
FAX: (408) 736-4356
Prices Subject To Change w/o Notice. Prices Good At Sunnyvale Store Only

MODESTO OFFICE:
3430 Tully Rd., Ste. #21
Modesto, CA 95350
Tel: (209) 525-8080
FAX: (209) 525-8120

FRESNO OFFICE
3071 W. Shaw Ave. #101
Fresno, CA 97113
Tel: (209) 243-4250
FAX: (209) 243-4255

HOURS: M-F 9-7 Sat 10-4 EMAIL: sales@aromatech.com

Experience Makes the Difference!!

Our Happy Customers = 3-Com, National Semi-Conductor, NASA, Cypress, HP, Intel, Tandem, etc.

ECONOMY SYSTEM

- Intel Pentium® 60/100 CPU & M/B
- 16MB RAM
- 630MB Hard Drive
- IDE Ctrl w/2S/1P/1G
- 1.44MB Floppy Drive
- Mouse, 104 Keyboard
- Mini Tower Case w/250W
- SVGA Card 1MB

ONLY

$269/299

Option - 4X CD-ROM, Sound Card, Speaker.....$59

686 CYRIX MX-200/233

- 586 M/B w/512K
- 16MB EDO RAM
- 2.1GB Hard Drive
- 1.44 Floppy Drive
- Mini Tower Case
- SVGA Card 1MB
- 104 Keyboard, Mouse

$369/389

MMX 200/233

- 586 M/B w/512K
- 32MB EDO RAM
- 3.2GB Hard Drive
- 1.44MB Floppy Drive
- Mini Tower Case
- SVGA card 2MB
- 104 Keyboard, Mouse

AMD $449/459
Intel $469/499

PENTIUM® II 233/266/300/333

- Intel Pentium® II CPU + Fan
- Intel LX Chipset M/B
- 32MB SDRAM
- 4.3GB Ultra DMA HD
- 1.44MB Floppy Drive
- Matrox Mystique 220 4MB
- Mid Tower ATX Case

$679/719/829/969

PENTIUM® II 350/400

- Intel Pentium® II CPU+Fan
- ASUS BX Chipset M/B
- 64MB SDRAM
- 4.3GB Ultra DMA HD
- 1.44MB Floppy Drive
- Matrox Mystique 220 4MB
- Mid Tower ATX Case

$1219/1429

CPUs

INTEL

Pentium® II 300/266/233 $350/245/202
MMX 233/200/166 ....$131/107/99
Pentium® 166/100 .....$95/75
DX4-100.....$40
387SX-33.....$14

AMD

K6266/233/200.....$166/92/83

CYRIX/IBM

686MX 200/233 .....$67/85

ASUS MMX

- ASUS TX 97E 512K M/B
- AMD K6-200/233/266
- 32MB EDO RAM
- 3.2GB Ultra DMA HD
- Diamond Stealth 2MB
- Mitsumi 1.44MB FD
- Mini Tower Case
- 24X CD-ROM
- 16-Bit Sound Card
- 33.6 Modem w/Voice
- Win 95 Keyboard and Mouse

$609/619/709

INTEL MMX

- Intel Anchorage 512K M/B
- Intel MMX 166/200/233
- 32MB SDRAM
- 4.3GB Ultra DMA HD
- Diamond 3D 2000 Pro 2MB
- Mitsumi 1.44MB FD
- ATX Mid Tower Case
- 24X CD-ROM
- 16-Bit Sound Card
- 56K Modem w/Voice
- Keytronics Win 95 Keyboard
- Logitech MouseMan
- Free Games

$699/707/739

DUAL PII NT SERVER

- ASUS Dual P2 M/B
- Intel PII 233/266/300/333 Single
- 64MB SDRAM
- 4.3GB UW HD
- Adaptec 2940 UW Controller
- S3 Virge 3D 2MB
- Mitsumi 1.44MB FD
- ATX Mid Tower Case
- 24X SCSI CD-ROM
- Keytronics Win 95 Keyboard
- Logitech MouseMan

$1229/1269/1369/1519

SIMM MEMORY (MAJOR BRAND)

30 pins

1M/4M $3/9

72 pins (EDO)

4/8MB.....$7/14
16/32MB 25/43

128 pins (SDRAM)

16/32MB $28/47
64/128MB.....95/185

CACHE MEMORY

32Kx8(5V)/64Kx1.....$4/5
64Kx8/128Kx8(5V).....8/12

PC Repairs & Upgrades Welcome!!

GOVERNMENT, UNIVERSITY AND APPROVED CORPORATE P.Os WELCOME • 1-YEAR PARTS/ 3-YEAR LABOR/ LIFETIME TECH SUPPORT

MOTHERBOARDS

ASUS P2B w/PII 400.....$999
Intel Atlanta w/PII 333.....645
ASUS P2 L97 w/PII 300 475
Intel LX P2 w/PII 233 295
Intel Anchorage 512K w/200MMX.....230
Intel TX 512K.....72
TX Pro 512K 62
VX Pro 512K 55

MULTIMEDIA

12X/24X CD-ROM IDE....$41/50
24X/32X Toshiba 60/69
16-Bit Sound Card PnP.....13
Sound Blaster 16/64.....32/62
Speakers 80/240W.....10/25

PCI VIDEO CARDS

Matrox Mystique 220 4MB $65
Diamond 3D 2000 Pro 2/4MB.....49/55
S3 Virge 3D 2/4MB 36/40
Trident 1/2MB 19/25

HARD DRIVES

(3-Year Warranty)

FUJITSU

2.6/3.2GB $137/140

WESTERN DIGITAL

3.2/4.3GB.....145/168

QUANTUM

2.1/3.2GB.....139/155

(30-Day Warranty)

635/540/340MB....$95/89/79
270/240/210MB.....79/70/69
140/120/40MB 60/59/35

MONITORS

(3-Year Warranty)

9" TVS Mono $105
14" Leo .28.....121
15" Sampo .28 150
17" Imagic .28 269
17" Impression .27 325
19" Decaview .26.....549

CONTROLLER CARDS

EIDE/IO VLB/ISA/PCI....$9/14/20
Diamond Fire Post u/uw SCSI....85
Adaptec 3940 uw 399
Adaptec 2940U PCI 135

TEKRAM CACHE CONTROLLER

DC-600T ISA/IDE.....$79
DC-620B EISA/IDE 59
DC-680 VLB/IDE w/1MB.....79
DC-320 EISA/SCSI 59

CASES

Mini Tower Case w/250W.....$22
Med Tower Case w/250W 29
Full Tower Case w/200W.....48
ATX Mid Tower Case 51
Desktop w/250W.....33
Power Supply PS2/ATX 20/38

NETWORKING

NE2000 ISA/PCI PnP.....$13/15
3Com 3C905TX PCI 57
3Com 3C509-TPO/Combo 43/56
Intel BNC/AUI.....39
Intel 100 BaseT PCI 47
Hub 9/17 Port 46/90
Cables: Coaxial/Twisted Pair
Terminator, Connector.....Call

MODEMS

2496 Int/Ext. $13/23
14.4/28.8 .....25/30
33.6/56K w/Voice 37/58
33.6/56K US Robotics.....71/85
56K Diamond Supra w/Voice.....68
56K Diamond PCI.....61

MISCELLANEOUS

HD Removable Frame $17
Win 95 104 Keyboard Color 15
Keytronics 104 Keyboard 15
NEC 1.44 Floppy.....18
100MB Zip Drive Int. 85

MONTHLY SPECIALS

586 M/B & P-100.....$99
586 M/B & P-60.....69
SyQuest 270MB SCSI HD.....179
Micropolis 540MB SCSI HD 95
Toshiba 2.5" 120MB/340MB HD ..65/99

LABOR RATES/SERVICES

System Checkup $20
Multimedia Kit Install.....30
Hard Drive Install.....20
Motherboard Install.....30
Power Supply Install.....30
Modem Install.....30
Software Install.....30/hr.
System Troubleshoot .....40/hr.

• CPU and memory-related products are not exchangeable or refundable • Not responsible for typos or technical errors • All prices reflect COD cash discount • Prices subject to change w/o notice

LYNX

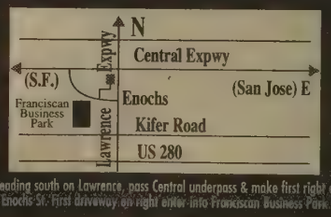
STORE HOURS
MON-FRI 9AM-6PM
SAT 11AM-3PM

Fortune Net Micro Inc.

3054 Lawrence Expwy, Santa Clara, CA 95051

(408) 481-9288 FAX:(408) 481-0866

Find us in The Franciscan Business Park



Heading south on Lawrence, pass Central underpass & make first right on Enochs St. First driveway on right enter into Franciscan Business Park.

A.R.T. MULTIMEDIA SYSTEMS, INC

424 S.MAIN STREET., MILPITAS, CA 95035
Tel. (408) 946-7852 * Fax (408) 946-7892
E-Mail: Artcom 7853@AOL.COM

Bus Hrs:
Mon-Fri: 9:30-6:00
Sat-Sun: 11:30-4:00

The Best in Service, Quality, and Price

Visit our WebSite at http://www.artmul.com
We provide ON SITE service, set-up, pickup, & delivery.
We have the lowest rates on labor & service for UPGRADES & REPAIRS

*Prices & availability subject to change without notice.
*Not responsible for typos.
*Prices based on check prices.
*Cash discount for currency only.
*Company term on credit approval
*School & Government PO's accepted

FOR THE MOST UPDATED PRICES, PLEASE REFER TO OUR SUNDAY SJ MERCURY COMPUTING AD

DUAL PENTIUM II CAD WORKSTATION/SERVER

Intel **Dakoda DK440LX** chipset, **supports Ultra DMA**
(2) Pentium II CPUs & fans
64MB ECC SDRAM DIM
Matrox Millenium II AGP w/4MB WRAM.
Adaptec Ultra Wide SCSI on MB
4.5 GB IBM (7200RPM) Wide
1.44 TEAC FD
ATX Medium Tower Case W/300W
104 **Keytronics** w/ WIN 95 Key
Crystal 16 bit sc on MB
Toshiba 32X EIDE CD ROM
180W Stereo Speakers
Microsoft Intellimouse &pad
Intel etherexpress 10/100 on MB
US Robotics **56K W/voice** Fax
Window NT w.s preloaded
(Monitor Not Included)

Pentium II® 333 $2463
Pentium II® 300 $2202
Pentium II® 266 $1950
Pentium II® 233 $1870

SUPERIOR SE440BX 100MHZ-BUS

Intel Seatle SE440BX chipset MB supports 66Mhz & 100Mhz system buses, DMA. & USB
64MB-100MHZ SDRAM uggradable to 348MB
6.4 GB Ultra DMA HD
1.44 TEAC FD
Matrox Millenium II AGP
4MB WRAM
ATX Medium Tower Case
104 Keytronics keyboard
Viewsonic G773 monitor
Crystal 16 bit SC on Board
Toshiba 32x EIDE CDROM
56K US Robotics Fax modem w/voice
180W Stereo Speakers
Microsoft Intellimouse, pad
Windows95 preloaded w/CD

Pentium II® 400 $2227
Pentium II® 350 $2014

PENTIUM II PROFESSIONAL WORK STATION

Asus P2L97 LX-440 MB chipset MB supports Ultra DMA/33, SDRAM
64 MB SDRAM (2 of 32MB)
Matrox Millenium II AGP w/4MB WRAM
6.4 GB Ultra DMA HD
1.44 TEAC FD
ATX Medium Tower Case
104 Keytronics KB w/ WIN 95 Key
Sony 200GS 17" .25 monitor
Creative Labs AWE 64 SC
Toshiba 32x EIDE CDROM
56K US Robotics Fax modem w/voice
180W Stereo Speakers
Microsoft Intellimouse & Pad
Windows95 preloaded w/cd &Man

Pentium II® 333 $2156
Pentium II® 300 $2026
Pentium II® 266 $1904
Pentium II® 233 $1860

MMX INTELLIGENT POWER

Asus TX97 w/Intel 430TX chipset MB supports Ultra DMA/33, SDRAM
64 MB SDRAM (2 of 32)
Matrox Mystique 220 w/ 4 M B
6.4 GB Ultra DMA HD
1.44 TEAC FD
ATX Medium Tower Case
104 Keytronics KB w/ WIN 95 Key
Viewsonic G771 monitor
Creative Labs AWE 64 SC
Toshiba 32x EIDE CDROM
56K US Robotics Fax modem w/voice
180W Stereo Speakers
Microsoft Intellimouse ,pad
Windows 95 preloaded w/cd

Pentium® 233MMX 1430
Pentium® 200MMX 1404
AMD K6 300 1554
AMD K6 266 1465
AMD K6 233 1390

SMART AN430TX SYSTEM

Intel Anchorage AN430TX chipset w/512K MB. supports Ultra DMA, 32MB SDRAM DIM.
Matrox Mystique 220 4MB
PCI EIDE w/IO & 16550 UART
3.2 GB Ultra DMA HD
1.44 TEAC FD
ATX Medium Tower Case
104 Keytronics KB w/ WIN 95 Key
MGC 1785 17" Monitor
Yamaha OPL4 16 Bit SC
Toshiba 32X EIDE CD ROM
33.6 US Robotics Fax modem w/voice
180W Stereo Speakers
Microsoft Intellimouse&pad
Windows 95 preloaded w/cd

Pentium®233MMX $1185
Pentium® 200MMX 1159

PENTIUM II LX440 POWER

Intel Atlanta AL440LX MB w/Yamahha OPL3-SA audio
Supports AGP (Accelerated Graphics Port)
Intel CPU w/256K cache & Fan
64MB SDRAM Dim (10 NS) upgradable to **384MB SDRAM**
Diamond **Viper 330** AGP 4MB
4.3 GB Ultra DMA HD
1.44 TEAC FD
ATX Medium Tower Case
Keytronics PS2 keyboard
Microsoft Intellimouse & pad
Viewsonic G773 17" monitor
US Robotics 56K w/voice fax
180W Stereo Speakers
Toshiba 32X EIDE CD Rom
Windows 95 Predloaded w/cd

Pentium II® 333 $1775
Pentium II® 300 $1644
Pentium II® 266 $1523
Pentium II® 233 $1479

NOTEBOOKS

TOSHIBA

***SATTELLITE PRO 470CDT**
200Mhz MMX, 2.1GB, 10X, 32MB Edo, 12.1" TFT, 33.6Fax
$2467

***SATELLITE PRO 480CDT**
233 MMX, 3.8GB, 10X CD Rom, 32MB Edo, 12.1" TFT, 33.6 FaX
$2672

***TECRA 520CDT**
166MMX, 2.02GB, 10X, 32MB EDO, 12.1" TFT, 33.6 Faxmodem
$2273

***TECRA 730XCDT**
150MHZ MMX, 2.02GB, 10X, 16MB EDO, 12.1" TFT, 28.8 FaxModem
$1500

HITACHI

***VISIONBOOK PRO**
233MMX, 32MB, 3.2GB, 56K, 20X, 13.3" TFT
$3024

***VISIONBOOK PRO**
266MMX, 32MB, 4.0GB, 56K, 20X 13.3" TFT
$3580

***VISIONBOOK PLUS**
166MMx, 16MB, 2.1GB, 33.6, 10X, 13.3" TFT
$1512

ULTIMATE PROFESSIONAL

Intel Anchorage AN430TX chipset, ultra DMA.512K 16MB SDRAM DIM
Diamond 3D 2000 w/ 4MB EDO RAM ,1.44 Teac FD
2.1 GB Ultra DMA HD
ATX Medium Tower Case
104 Mitsumi KB ,MS mouse&Pad
Yamaha MF701 16 bit stereo SC
Toshiba 24X EIDE CD ROM
180W Stereo Speakers
MGC 15" NI (1280x1024, .28dp)
Windows 95 Preloaded w/cd

Pentium®233MMX $871
Pentium® 200MMX $845

MULTIMEDIA

❖CREATIVE LABS

SoundBlaster AWE64 Gold Ret	180
SoundBlaster 16 bit PnP	39
SoundBlaster AWE64 oem	64
SoundBlaster 32 PCI oem	45
❖ TOSHIBA	
32X IDE/32X SCSI	72/103
24X EIDE	64
❖Mitsumi 16X	59
❖ CD Writer	
Yamaha 4X6x2 Int SCSI Rewrt	540
Yamaha 4X6X2 IDE Rewrt	450
Sony 2X6 Int Retail SCSI	350
Sony 2X8 Int. Retail IDE	330
Panasonic 4X6 Int. Ret.SCSI	345
❖ DVD	
Creative Labs Encore DXR-2	260

FAX MODEMS

❖SUPRA

Supra net commander ISDN oem	172
56K Int w/voice V.90 oem	99

❖US ROBOTICS Sportster

33.6 w/voice Int. oem	88
56K V.34 voice oem Int./V.90	109/129
56K V.34 voice Retail Int/ Ext	142/158
56K V.90 no voice Ret. Int/Ext	142/162
56K V.90 w/voice Ret. Int/Ext	142/218

KEYBOARDS

Mitsumi 104/Lite-on Touch pad	15/39
Maxiswitch/Keytronics	20/23
Focus 2001/7200	28/30
Focus 8200/9200	43/45
Microsoft Natural OEM w/s	50

MB & CPU'S

Intel SE440BX + PenII 400 /512k	$1046
Intel SE440BX + PenII 350/512k	$834
Asus P2B98-440BX+PenII 400/512k	$1014
Asus P2B98-440BX+PenII 350/512k	$802
Intel Dakota Dual PenII 333/512k	$1510
Intel Dakota Dual PenII 300/512k	$1240
Asus P2L97-S Dual+PenII 300/512k	$1110
Asus P2L97-SLX440+PenII 333/512k	$734
Asus P2L97-LX440+PenII 333/512k	$643
Asus P2L97-LX440+PenII 300/512k	$507
Asus P2L97-LX440+PenII 266/512k	$381
Asus P2L97-LX440+Pen II 233/512k	$338
Intel Atlanta AL440LX+PenII 333/512k	$660
Intel Atlanta AL440LX+PenII 300/512k	$525
Intel Atlanta AL440LX+PenII 266/512k	$399
Intel Atlanta AL440LX+PenII 233/512k	$356
Anchorage/512k+Pentium233MMX	$235
Anchorage/512k+Pentium200MMX	$208
Asus SP97V/512k+Pentium 233MMX	$208
Asus SP97V/512k+Pentium 200MMX	$180
Asus SP97V/512k+AMD K6-233 Mhz	$164
Asus TX97/512K+Pentium 233MMX	$245
Asus TX97/512K+Pentium 200MMX	$218
Asus TX97/512k+AMD K6 300MMX	$380
Asus TX97/512k+AMD K6 233MMX	$202
Asus TX97/512k+AMD K6 200MMX	$191

VIDEO CARDS

❖TRIDENT

1MB ISA/1MB PCI	35/29

❖DIAMOND

Stealth 3-D PRO 2mb/4mb	55/63
Stealth II 4MB PCI SGRAM	93
Monster 3-D w/4mb Dram	142
Monster II w/8mb/12mb	210/265
3D 4000 4MB AGP	74
FireGL1000ProAGPw/4m/8	148/178
Viper 330 AGP 4mb	99

❖MATROX

Millenium II PCI 4MB/8MP	130/179
Millenium II AGP 4MB/8M	128/175
Mystique 220 4MB oem	83

❖NUMBER NINE

Revol. 3D 4mb/8mb SG AGP	110/162
Revol. 3D 4mb/8mb WR AG	110/162

❖ATI

3D ProturboPC2TV 4MB/8MB	82/104
All-In-WonderProAGP 4MB/8MB	219/245
XPERT@PLAY AGP 4MB/8MB	108/130
XPERT@WORK AGP 4MB/8MB	90/115

MONITORS

❖NANAO

EIZO FX-B5/TX-C7	468/808
TX-D7S(20")	1525
EIZO FX-C5/FX-C6	654/735
FX-E7 / FX-E8	1525/2039

❖NEC

P750(17".25dp)/M700	756/556
E500/E700/M500	300/556/359
E1100(21")/A700(17")	1210/468

❖MAG

DJ800(19") / DX715T	630/566
DJ500T / DJ700	215/393
DX15T / DX700T (.25DP)	275/475
DJ920(21") / DJ702E	940/386
Princeton EO 50 / EO70	220/427
Princeton EO 90 (19" .26)	670

❖SONY

100ES/100GS/17SE2T	295/329/505
200GS/200ES/200PS	595/520/742
20SE2T/W900 (24")	1465/3220
400PS(19")/500PS (21")	929/1313

❖HITACHI

CM500/CM620	230/420
CM800 (21")/CM-630	1049/443
CM-751 / CM802	780/1224

❖VIEWSONIC

E641 (14") /PT775	165/648
P815(21")/ E655	1230/239
G653(15")/P655(15")	246/257
17GA/GA771	504/420
G773 / P775	440/484
P810/E771/PT771	1090/338/597
G800 / G810/PT813	925/986/1284
G790/GT775	765/571

❖NOKIA

447XAVC (17")/447XI	700/577
445XI (21") /446P(19")	1306/820

❖IIYAMA

9017E(17")/8617E(17")	555/460
901GT(19")/9221E(21")	735/1095

❖MGC

NI 14" Monitor 0.28	138
NI 15" .28 Digital Control	175
NI 17" Monitor 0.28	305
NI 1785 1600X1200 0.26	375

BACKUPS

T-3000 3.2GB/T4000 8GB	165/340
Iomega Zip 100 IDE Int./SCSI	95/119
Iomega Zip 100 Parrallel	139
Iomega Jaz 1.0GB SCSI Int.	250
Iomega Jaz 1.0GB SCSI Ext	265
HP DAT 4-8GB oem	710

❖TEAC

Floppy Drive 1.44	20

HARD DRIVES

❖FUJITSU

4.3 GB EIDE(M3043AT/UD)	168
5.2 GB EIDE(M3052AT/UD)	205
6.4 GB EIDE(M3264AT/UD)	215

❖QUANTUM

3.2 GB EIDE(ST33200SE-A)	155
4.3 GB EIDE(ST34300SE-A)	177
6.4 GB EIDE(ST36400SE-A)	252
8.4 GB EIDE(ST38400SE-A)	309
2.1 GB UL SCSI(ST32100SE)	206
4.3 GB UL SCSI(ST34300SE)	269
6.4 GB UL SCSI(ST6400SE-S)	350
8.4 GB UL SCSI(ST8400SE-S)	455

❖WESTERN DIGITAL

2.1 GB EIDE(AC22100)	142
3.2 GB EIDE(AC23200)	155
4.3 GB EIDE(AC34300)	177
6.4 GB EIDE(AC36400)	217
4.3GB UW SCSI (E4360-007)	475
9.1GB UW SCSI (WDE9100W)	680

❖SEAGATE

2.1GB UDMA (ST32122A)	138
2.2GB UW SCSI (ST32272W)	310
4.5GB UW SCSI (ST34509W)	575
9.0GB UW SCSI (ST39173W)	760

❖MAXTOR

4.3 GB ULTRA DMA	165
6.4GB ULTRA DMA	208
8.4GB ULTRA DMA	278

❖IBM

2.1GB UW SCSI (AS32160W)	175
4.3GB UW SCSI (AS34560W)	355

CONTROLLERS

❖ADAPTEC

Adap. PCI 2940AU OEM w/SW	140
Adap. PCI 2940UWw/SWOEM	159

CASES

Baby AT Case w/ 230W	39
Mini Tower case w/230W	30
Medium Tower case 230W	48
ATX Desktop case	65
ATX Medium case	67
ATX Full Tower case w/300W	109

SOFTWARE

MS Win NT 4.0 WS w/sys	140
MS Win NT 4.0 Server w/sys	445
Office Pro 97 no manual w/sys	150
Office Pro 97 w/manual w/sys	210

MICE

MS mouse serial/bus w/sys	23/48
MS IntelliMouse w/sys	26
Logitech Mouseman/Trackman	23/40
Logitech Marble Trackman	50

*Pentium is a registered trademark of Intel Corporation.

Intel Pentium II 233~400 MHz 8.4GB 64MB 32XCD SB64 56K

*Intel Pentium II 233~400MHz w/512KB L2 Cache include Intel MMX Technology
*Intel SE440BX PentiumII MB w/AGP Port
*64MB SDRAM 10ns
*8.4GB UltraDMA/33 Hard Drive
*Intel Express 3D AGP 2X 4MB SGRAM Graphic
*17" SVGA Monitor 1280x1024
*Teac 1.44MB Floppy Drive
*Keytronic 104 Keyboard
*Microsoft mouse w/ pad
*32X EIDE Internal CDROM
*Creative Lab AWE 64 Sound Card
*Yamaha Yst-M7 Speaker
*U.S. Robotics Internal 56K Fax/Data/Voice Modem
*ATX Medium Tower Case w/235WattsPS
*Microsoft Windows 95

Ask for upgrade option for PC100 compliment memory

$1799 / 1869 / 1999 / 2199 / 2319 / 2499
233MHz / 266MHz / 300MHz / 333MHz / 350MHz / 400MHz

Pentium 200~233MHZ 4.3GB 32MB 24X 33.6

* Intel Pentium 200~233 MMX
* Intel or Asus or Abit 430TX Chipset w/512KB PB Cache ATX form format
* 32MB SDRAM Dimm 12ns
* UltraDMA/33 4.3GB EIDE Hard Drive
* 15" SVGA .28DP Flat Screen Monitor
* PCI Video w/2MB
* Teac 1.44MB Floppy Drive
* KeyTronic 104 Enhanced KB
* Logitech PS/2 Mouse w/ Pad
* Built in PCI EIDE Controller 4HD/2FD
* 2 Serials (16550 UART) & Parallel Port
* ATX Med Tower Case w/ 230 Watts
* 24X EIDE Internal CDROM & 16 bit Sound
* Shield computer power speaker
* 33.6 Internal Fax Modem
* Microsoft Windows 95

Option:
*MS Office 97 Small Business Edition $219

$989 / 1039
200MMX / 233MMX

AMD K6 233/266/300 MHZ MMX Enhanced Processor

* AMD K6 233/266/300 MHz w/CPU Fan
* ASUS TX Chipset PCI Bus MotherBoard w/512 PB Cache
* 32MB SDRAM Dimm 12ns
* UltraDMA/33 4.3GB EIDE Hard Drive
* 15" SVGA .28DP Flat Screen Monitor
* PCI Video card w/2MB
* Mitsumi 1.44MB Floppy Drive
* Mitsumi 104 Enhanced Keyboard
* Mitsumi Mouse w/ Pad
* Built in Board PCI EIDE Controller 4HD/2FD
* 2 Serials (16550 UART) & Parallel Port
* Med Tower Case w/ 230 Watts
* Creative Lab SoundBlaster 16
* 24X EIDE internal CDROM
* Shield computer power speaker
* 33.6 Internal Fax Modem
* Microsoft Windows 95

$ 959 / 1049 / 1129
233 / 266 / 300

Cyrix 686MX PR200/PR233 3.2GB UltraDma HD 16MB

* Cyrix MX 686 PR200/PR233 w/MMX Enhanced
* ASUS SP97-V SIS Chipset PCI motherboard w/ integrated VGA & 512KB PB Cache
* 16MB EDO Simm 60ns (up to 256MB)
* 3.2GB UltraDMA/33 IDE Hard Drive
* 14" SVGA .28DP Non-interlace color Monitor
* Built in Video adapter
* Mitsumi 1.44MB Floppy Drive
* Mitsumi 104 Enhanced Keyboard
* Mitsumi Mouse w/ Pad
* Built in Board PCI EIDE Controller 4HD/2FD
* 2 Serials (16550 UART) & Parallel Port
* Mini Tower Case w/ 230 Watts
* 16 bit sound card
*24x internal CD Rom
*Mini Shield computer speaker
*Microsoft Windows 95
*Xoom HomeOffice Suite 97

$ 729 / 759
Cyrix M2 PR200 / PR233

Monitors

Impression 14" 4VX 1024x768 .28dp NI	$179
Impression 15" 5VX 1280x1024 72Hz .28dp	$219
Impression 17" 7 PLUS 1280x1024 72Hz .27dp	$399
Impression 17" Venna Pro .25dp 1600x1280	$559
Hansol 14" 1024 .28dp	$179
Hansol 15" 1280 .28dp	$219
Hansol 17" 1280 .28dp	$399

ViewSonic®

ViewSonic 14" E641 .28	$249
ViewSonic 15" E655/15GS/15GA	$339/359/399
ViewSonic 17" 17GA/17GS/17PS	$649/599/699
ViewSonic 17" GT770/PT770/PT775	$689/729/899
ViewSonic 20" GT800 .30	$1249
ViewSonic 21" G810/P810/PT810	$1449/1499/1639

SONY

SONY 15" 100SX/100SF .25	$349/399
SONY 17" 200SX/200SF/17SE2T .25	$599/649/799
SONY 20" 300SFT/20SE2T	$1429/1899

NEC

NEC 15" M500	$349
NEC A700/A500	$599/349
NEC E500/E700	$399/679
NEC 21" E1100	$1250

GoldStar

StudioWork 77i	$399

IIYAMA

Iiyama 17" VisionMaster .26 /Pro .25	$559/649
Iiyama 21" MT8221E/MT9021E	$1359/1449

HITACHI

Hitachi 15" Pro 500/17" Pro 600	$319/559
Hitachi 20" Pro 20/21" Pro 800	$1199/1449

Video Cards

Trident 9000(512K)/8900D(1MB) ISA 1024x768	$35/49
Trident 9680 PCI 1MB/2MB	$45/59
Trident ProVidia 9685 w/TV out & 2MB EDO	$79
Cirrus Logic 5446 PCI 1MB/2MB	$45/59
Cirrus Logic LAGUNA3D 5464 PCI 4MB Rambus	$109

DIAMOND

Diamond Stealth 64 VLB/PCI 1MB/2MB DRAM	$59/74
Diamond Stealth 64 Video PCI 1MB/2MB EDO	$65/79
Diamond Stealth 64 Video PCI 2MB VRAM	$129
Diamond Stealth 3D 2000 PCI 2MB/4MB EDO	$89/115
Diamond Stealth 3D 3000 PCI 2MB/4MB VRAM	$149/195
Monster 3D 3400XL 4MB EDO	$239

ORCHID

Righteous 3D VGA 4MB EDO	$229

ATi

3D Xpression PCI 2MB/4MB SDRAM	$129/149
All in Wonder PCI 4mb	$179
All in Wonder Pro PCI/AGP 4mb	$265/285

matrox Millennium

MGA Millennium II 3D PCI 4MB WRAM	$245

MYSTIQUE

Mystique 220 PCI 2MB/4MB SGRAM Retail Version	$139/169
Memory upgrade for Mystiques 2MB/4MB/6MB	$49/95/145

RAINBOW RUNNER

Rainbow Runner Studio For Mystiques	$245
Rainbow Runner Television For Mystiques	$89

Intel Pentium II 233~400 6.4GB 64MB SDRAM AGP Port

*Intel Pentium II 233~400MHz w/512KB L2 Cache W/MMX Technology
*Asus P2B PentiumII 440BX MB W/AGP Port
*64MB SDRAM
*6.4GB UltraDMA/33 EIDE Hard Drive
*Matrox Productiva G100 AGP Video 8MB
*17" SVGA Monitor 1280x1024
*Teac 1.44MB Floppy Drive
*Keytronic 104 Keyboard
*Microsoft mouse w/ pad
*32X EIDE Internal CDROM
*Creative Lab AWE 64 Sound Card
*Yamaha Yst-M7 Speaker
*U.S. R Internal 56K Fax/Data Modem
*ATX Medium Tower Case 235Watts
*Microsoft Windows 95

Ask for upgrade option for PC100 compliment Memory

$1649 / 1699 / 1819 / 2029 / 2149 / 2349
233MHz 266MHz 300MHz 333MHz 350MHz 400MHz

Printers & Scanner

HEWLETT® PACKARD

*DeskJet 670/720CXI	$199/299
*DeskJet 890CXI	$389
*DeskJet 1000CXI	$399
*LaserJet 6LXi/6PXi	$389/739
*LaserJet 4000/4000T	$1125/1279
*LaserJet 4000N/4000TN	$1439/1599
*ScanJet 6100	$699
*ScanJet 5100CXI parallel/5S serial	$289/189
MICROTEK ScanMaker E3 Plus	$149
MICROTEK ScanMaker E6	$285
MICROTEK ScanMaker E6 Pro	$499
MICROTEK Color Pagewiz for Win	$159
UMAX Astra 610P	$139
UMAX Astra 610S	$149
UMAX Astra 1200S Windows Deluxe	$249
UMAX Astra 1200S Windows Photoshop	$499
Logitech PageScan USB Color	$199
Logitech ScanMan Color 2000	$129

Motherboard

*Pentium SP97-V/X 512PB Cache 75~233MHz (MMX,Cyrix 686,AMD K6)	$95/$105
*Pentium TXP4/X Triton TX 512PB Cache 75~233MHz (MMX,Cyrix 686,AMD K6)	$115/129
*Pentium TX97/X Triton TX 512PB Cache 75~233MHz (MMX, Cyrix 686,AMD K6)	$145/160
***Pentium II P2L97/S 440LX / AGP Port 233MHZ~333MHz**	**$169/279**
***Dual Pentium II P2L97DS 440LX / AGP Port 233MHz~333MHz Ultra Wide SCSI**	**$439**

Intel

*Pentium TX 512kb Cache,16 audio	$179
*Pentium Pro Venus PCI ATX MB	$150
*Pentium II AL440LX MB Universal Serial Bus	$195
*Dual Pentium II DK440LX MB Uinversal Serial Bus	$549
*Pentium II R440LX MB For server	$599

Mass Storage

HEWLETT® PACKARD **COLORADO**

*Colorado 5GB Int/Ext	$200/250

IOMEGA

*Zip 100MB Ext Parallel/SCSI	$145/145
*Zip 100MB Int IDE	$99
*Zip 100MB Ext Zip Plus	$189
*Jaz 1GB SCSI Int/Ext	$295/395

WESTERN DIGITAL

*2.0GB Ultra/DMA Hard Drive	$145
*3.2GB Ultra/DMA Hard Drive	$169
*4.3GB Ultra/DMA Hard Drive	$199
*6.4GB Ultra/DMA Hard Drive	$249
*Quantum 2.1GB ST Ultra/DMA HD	$150
*Quantum 3.2GB ST Ultra/DMA HD	$175
*Quantum 4.3GB ST Ultra/DMA HD	$199
*Quantum 6.4GB ST Ultra/DMA HD	$255
*Quantum 8.4GB ST Ultra/DMA HD	$345

CDROM, Modem, Speaker

*USRobotics SportSter 56K Int/Ext	$145/165
*USR Courier V.Everything 56Int/Ext	$205/240
*USR SportSter Bulk 56K Int/Voice	$99/120
*Diamond 56K PCI V.90 Int Voice/Fax	$89

MODEM

*Toshiba SCSI2 32X CDROM	$109
*Toshiba 32X EIDE CDROM	$95
*Mitsumi 32X/24X EIDE CDROM	$92/75
*Pioneer 24X/32X Slot EIDE	$92/75

SOUND

SoundBlaster 16	$44.95
SoundBlaster 64 Value	$79.95
SoundBlaster 64 Gold	$174.95
SoundBlaster Eqsonic PCI	$49.95
Diamond Monster M80	$94.95
Diamond Monster Sound	$139.95

SPEAKER

Power Speaker YSTM7H	$49.95
Altec Lasing ACS45 Subwoofer System	$89.95

AiM Computers

1819 Willow Pass Road, Concord,CA 94520
TEL: (510) 687-2822 FAX: (510) 687-5276

(All calls may be monitored to insure quality)

Come Visit http://www.aimcomp.com/

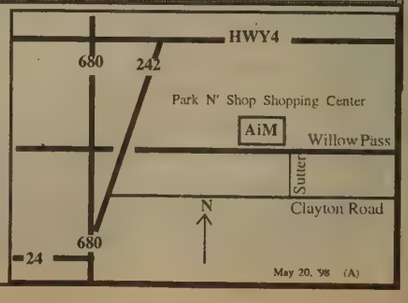
Hours: Mon-Sat 10:00-7:00 Email: sales@aimcomp.com

VISA MasterCard DISCOVER

AiM Quality Guarantee
* Lifetime Labor & 1 Year Parts
* 72 Hours Burn in

On-Site Service Repair Available
Delivery & Setup Available
Financing & Leasing Available

Prices subject to change without notice
Not responsible for typographical errors
Trademarks are registered by the respective companies
Contents subject to change without notice
** Limited warranty, see store for detail
# After Rebate Price



compare.net

continued from page 114

Traina explains, "It's kind of complicated because we have every single product on our site, regardless of whether the manufacturer ever pays us a dime. So a way to look at is that, with the advertorials that we do—which are really just 'click here for more information'—we only do that after people have searched and have requested the information, so we don't push it in peoples faces. It's almost like selling an expanded Yellow Pages ad. That's what we do."

Walk This Way

The whole walk-through process goes a little something like this: "Someone comes in the door, we show them a banner ad [which by the way they do not allow manufacturers to take out, due to the bias issue], they start searching, clicking on this and that [data-mining], and they choose a product. That's were the advertorials come in. If they want to get more information on a TV, they can see pictures and text, rather than just check marks. Next, when they're ready to buy, we recommend retailers like Auto-By-Tel and we get compensated. We quote list prices [the price the manufacturer sets]—so that it's apples to apples—and our retailers will then sell at a discount to that. In pretty much every category we have more than one retailer, so we're not favoring one or the other." I suppose you could say Compare.Net are like the very clever middle-men.

But what's this data-mining? That's sound like a privacy issue. According to Traina, they never, ever, ever give peoples names out to anyone else and when they do data-mining they do it totally anonymously. That's a good policy. No reason to shoot yourself in the foot. And the information gathered is very valuable to the manufacturers as you can only imagine. Having the insight on what people really want could decide the fate of many products. And so what about favoring a "member" manufacturer, rather than say, a non-member manufacturer. How does Compare.Net maintain its non-bias stance on that?

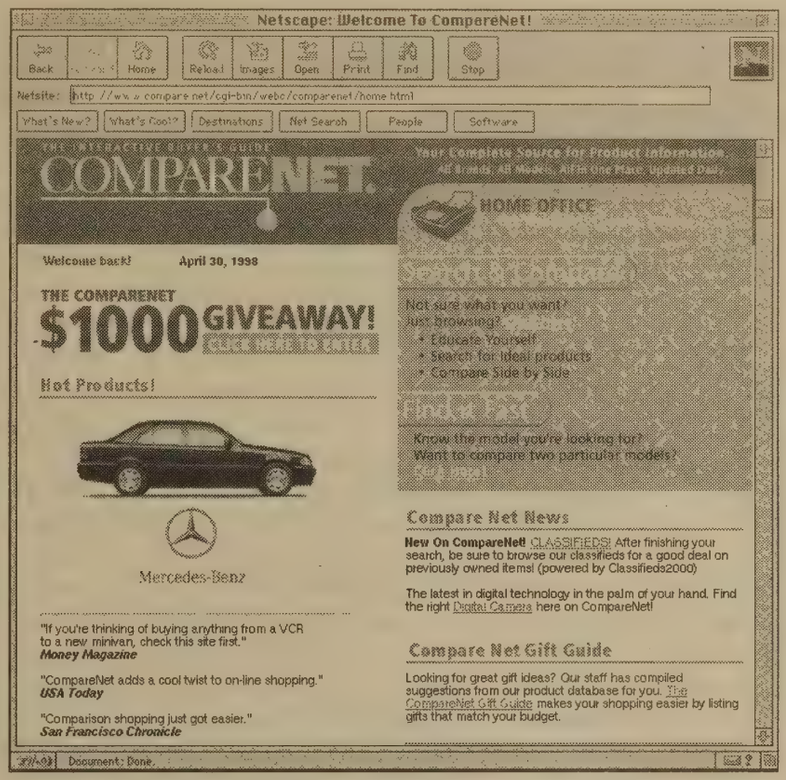
"We deal in 'price' and 'features,'" says Traina, "So it's objective information rather than subjective. We never take a bias, in our editorial or anything."

Give 'Em What They Want

Compare.Net places great importance on customer service. When I went browsing the sight a while back for a portable CD player and found none, I emailed the staff—a link that was very easy to find—and asked them if they had such a category. Someone from the administrative department responded right away letting me know that such a category did not exist as of yet, but that it would be a great idea.

"People send us email all the time wanting advice," comments Traina. He continues: "We have full-time people dedicated [to customer service], and actually we get a lot of our ideas from our users. Last month we had almost one and three-quarter of a million visits to our Web site. Our users feel really passionately about us because we are doing something that helps them. We even added breadmakers!" Traina explains, "We didn't think they were such a popular thing, but so many of our users were asking for them, we had to provide it to them.

"A lot of our users might be mothers and they don't have a lot of time to spend and so we save them from having to go to the mall with the kids. Another thing is with a lot of the guys, they don't want to admit that they don't know what Dolby Digital is or whatever... so we provide a safe forum to do their research too."


Netscape: Welcome To CompareNet!
Back
Home
Reload
Images
Open
Print
Find
Stop
Netsite: http://www.compare.net/cgi-bin/webc/comparenet/home.html
What's New?
What's Cool?
Destinations
Net Search
People
Software
COMPARENET.
Your Complete Source for Product Information
HOME OFFICE
Welcome back! April 30, 1998
THE COMPARENET
$1000 GIVEAWAY!
Hot Products!
Not sure what you want? Just browsing?
• Educate Yourself
• Search for Ideal products
• Compare Side by Side
Know the model you're looking for? Want to compare two particular models?
Mercedes-Benz
"If you're thinking of buying anything from a VCR to a new minivan, check this site first." Money Magazine
"CompareNet adds a cool twist to on-line shopping." USA Today
"Comparison shopping just got easier." San Francisco Chronicle
Compare Net News
New On CompareNet! CLASSIFIEDS! After finishing your search, be sure to browse our classifieds for a good deal on previously owned items! (powered by Classifieds2000)
The latest in digital technology in the palm of your hand. Find the right Digital Camera here on CompareNet!
Compare Net Gift Guide
Looking for great gift ideas? Our staff has compiled suggestions from our product database for you. The CompareNet Gift Guide makes your shopping easier by listing gifts that match your budget.
Document: Done.

> "People work really hard here, but it's a great office environment because the people are all young, we have a softball team, we have beers on Fridays, it's really casual...you can wear whatever you want."

Talking 'Bout Their Generation

With the whole new world of e-commerce coming into play, businesses on the Internet are becoming a very viable way of making ones living. "One of the problems with the Internet [in the beginning] is that a lot of people just went out and did stuff because it was cool, which is great. But if you're running a business, you really have to understand what the market wants, and think carefully about how you can meet a market need and how you can meet it profitably.

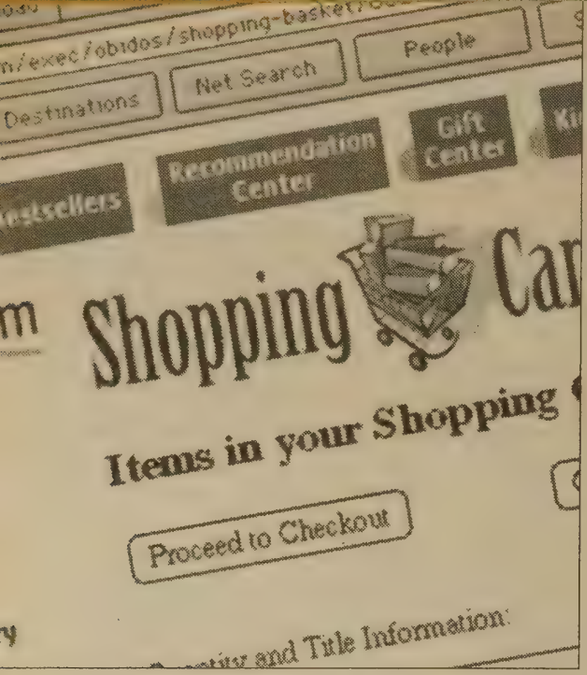
"There were generation one and generation two Internet companies. The generation one companies had the really cool ideas but never really thought through the business-end of what they were doing. And generation two Internet companies thought, 'OK, is there a business here and if so, what is it? Where do we fit in?' And that's what we did."

So, it seems, the key to running a successful startup in Traina's case is actually four-fold. It's all about maintaining solid partnerships with other online services, manufactures, Web site users, and his own employees.

I figured that the best way to describe what Compare.Net was doing was sort of an online *Consumer Reports*, but Traina wanted to make it very clear that they were both very much not alike. "What they'll do is," Traina explains the difference, "once a year, [*Consumer Reports*] buy ten TV sets, and then they test them, and they'll heat them to 4000 degrees, and then they'll back their Volvos over them [*laughs*], and then they'll form a really strong opinion about them. What we do is, we'll show you all 800 TVs and we update our database every single day." ◆

Copyright © 1998 by Sara Tassione and MicroTimes. *All rights reserved.*

Safe Shopping On The Internet



Don't Go Netsurfing Without These Common Sense Rules

By Peter Linde and Sam Penrose

This month, Peter offers some common sense rules for safely doing business on the Internet, while Sam delves into a controversy about Macs as Web clients vs. its PC counterparts.

Have I Got a Deal For You!

By Peter Linde

The question on everyone's mind is, "Is it safe to do business on the Internet?" The answer is a resounding, "Yes!" But just like business transactions in the real world, you can't afford to leave your common sense at the door.

Although you might not realize it by reading some of the reports in the mainstream press, commerce on the Internet is nothing new. In fact, people have been using the Internet for commerce practically since cans and strings formed the network that connected computers. Before the World Wide Web, before America Online, even before The Well, people turned to News Groups to buy and sell just about everything under the sun. Consequently, we have years of experience from which to draw certain, mostly common sense rules for doing commerce on the Web. Although most of these rules will work fine for either party in a transaction, and both buyers and sellers can be conned if they are not careful, I am gearing this column toward consumers who want to buy stuff rather than businesses that sell the stuff.

Rule #1: Caveat Emptor—Let the Buyer Beware

What could be more simple? And yet, you might think that this was the most difficult rule of all to follow. There is something about the Internet that turns normal, intelligent people into gullible dolts who believe everything they read.

It seems that if it arrives via electronic mail, most Internet User's will believe that reading "virus" email can erase your hard drive (it can't, by the way), that famous department stores sell cookie recipes for $250, that boys in England with cancer want your business card so that they can get into the *Guinness Book of World Records* before they die (they don't, by the way), or that trout live in trees. But that's not all: Email and the Web seem to hypnotize people into believing the most outrageous claims about products.

Listen: It's not like the rules of commerce, or physics for that matter, suddenly don't apply on the Internet. If you would think it was too good a deal to be true at your local store or from some guy on a street corner, chances are pretty good that it's too good to be true on the Internet as well.

Rule #2: Know Who You're Dealing With

When you buy from a local store, or even from an ad in the paper, chances are pretty good that you know a few things about the person or business to which you are giving your money. You should make sure you know as much as possible about anyone with whom you do business on the Internet. Anyone can create a great looking Web page. You can't tell the size of a company, or just about anything else from a Web page (see Rule #1). Where is the company or individual based? In another state? In the US? What kind of reputation do they have? What are the laws in your area as well as theirs that will protect you should your transaction not live up to your expectations?

Laws vary from county to county, yet now you might be buying that self-rotating wicket from someone in Abu Dhabi. Be smart. Ask questions. If dealing with a company, find out about return polices and don't forget to ask about hidden costs such as shipping and restocking fees. If you are buying from an individual, ask for a 7 day right to return. If they won't grant you that, see Rule #1. If they do grant you the right to try before you buy, it's no guarantee that they are on the up and up (yes, they could be lying to you), but at least you will have tried to protect yourself.

In general, you are safe dealing with established companies. You aren't going to have trouble buying on the Internet from companies like Amazon.com, Apple, Virtual Vineyards or any other national chain.

Rule #3: Always Use Your Credit Card

Is it safe to send your credit card information over the Internet? When it comes to buying, it's just about the safest method of payment. Here's why:

Most reputable companies who take credit card information over the Internet provide secure servers for doing so. Secure Servers encrypt your credit card and order information so that it is extremely difficult, though not impossible, for someone to intercept information and decode. However, it is much more likely that someone will pull your credit card information out of your own garbage can than that they will sniff your information off the Internet—encrypted or not. The biggest reason for using your credit card to purchase products over the Internet has nothing to do with technology. Using a credit card provides near indemnity against loss from unscrupulous business practices. If that $10 "Engraved Image of President Washington" turns out to be a 2¢ postage stamp, you can simply call your credit card company and have them hold payment to the company. If you paid by check, or worse, by cash, you are out of luck.

> There is something about the Internet that turns normal, intelligent people into gullible dolts who believe everything they read.

continued on page 128

BMUG's Choice for Macintosh Specialty Store ...Since 1985

MAC SM

Modern Accessories for Computers
Rental, Sales, Lease Available

800-BUY-A-MAC Order Line for US & CA (Toll Free!)
(510) 644-0500 General Number / Sales Department
(510) 549-8785 Macintosh Repairs
(510) 644-0584 Order by Fax Web Page: http://www.m-a-c.com
2010 Shattuck Avenue, Berkeley, CA 94704

Store Hours
10:00 a.m. -- 6:00 p.m.
MON -- SAT

ATM VISA MasterCard

"Best Place to Buy Computer" . . . Express Newspaper

Internet Corner

Free Internet Access
Free one month internet access with any computer purchase

System 8.1 OS	**$99**
NetScape Navigator for Macintosh	**$49**
Internet Books	**20% Off**
Adobe Pagemill	**$99**
US Robotics 56K X2	**$179†**

†After $50 Factory Rebate

Printer/Scanner

Apple LaserWriter 4 / 600	**$895**
Apple LaserWriter 12/ 640	**$1595**
Epson Stylus 600, w/ Cable	**$269**
Epson Stylus 800, w/ Cable	**$429**
HP Laserjet 6MP	**$949**
HP Laserjet 4000	**$1895**
HP LaserJet 4MV, 11X17 Size	**$2895**
UMAX Astra 610 Color Scanner	**$149**
UMAX Astra 1200 Color Scanner	**$249**

Computer Upgrade

RAM Super Sale

8MB Dimm	**$49**
16MB Dimm	**$79**
32MB Dimm	**$129**
64MB Dimm	**$199**
32MB G3 Dimm	**$129**
64MB G3 Dimm	**$229**
128MB G3 Dimm	**$399**
16MB, PB 1400	**$129**
32MB, PB 1400	**$299**

Others Available

Hard Disk

Quantum 2GB	**$279**
Quantum 2GB IDE	**$269**
Quantum 4GB	**$379**
Toshiba 2.1GB 2.5"	**$449**
Toshiba 1.4GB 2.5"	**$329**
External 3.5"Case	**$99**
External 2.5" Case	**$79**

Micropolis 2 GB AV $269

Call us for On-Site Upgrade and Repair

Back Up Drives

ZIP Drive w/ 1 Cart	**$139**
ZIP Drive Plus w/ 1 Cart	**$199**
iomega ZIP Drive Cartridges 1 Pak	**$15**
iomega ZIP Drive Cartridges 3 Pak	**$42**
iomega JAZ 1 Gig Removable Drive	**$299**
JAZ Cartridge- *3 or more Special*	**$89**

La-Cie Drives

La Cie 24X CD Drive	**$179**
La Cie 4X8 CD-R Recordable Drive	**$599**
La Cie 2X6 CD-R Recordable Drive	**$399**
La Cie 2Gig Hard Disk	**$279**

EtherNet Corner

PCI Ethernet Card	**$59**
LC Ethernet Card	**$89**
5-Ports Ethernet Hub	**$65**
9-Ports Ethernet Hub	**$90**
LAN Starter kit-5-Port Hub & 3 PCI Cards	**$279**
Friendly Net Adapter-AAUI--> 10T	**$39**
Etherwave Printer Adapter-Appletalk ->10T	**$295**
Lan Tester Tool Kit	**$159**
Remote Cable Tester	**$69**

HELP!
Macintosh not working?
We can fix it quickly!

G3 PowerMacs

PM G3/233mHz
32MB/4000HD/24x CD
$1699

PowerMac	Price	Lease
G3/233DeskTop, 32/4GB/CD	**1699**	**64**
G3/233Tower, 32/4GB/CD	**1999**	
G3/266DeskTop, 32/4GB/CD/ZIP	**1999**	**76**
G3/266Tower, 32/6GB/CD/ZIP/AV	**2499**	**94**
G3/300Tower, 64/4GB-w/CD	**3395**	**128**
9600/300, 64/4G/CD/ZIP	3495	132
PowerBook		
PowerBook 1400cs/166 16/2G/CD	**1749**	**66**
PowerBook G3--New Models		Call
Display & Printer		
AppleVision 850 20" Display	1795	68
LaserJet 6MP, 600dpi Printer	949	41
Princeton EO 90, 19" Color Display	799	30
Sony 100GS 15" Multisync monitor	399	16
Sony 200GS 17" Multisync monitor	**699**	**30**
Sony 400PS 19" Multisync monitor	**995**	**38**

36Mo/$1 Lease, $3000-$8000 category. Business Only, Tax Not Included

We Buy Mac's

•We Buy or Trade Any Macintosh CPU (68040 minimum) & Peripherals
•Or We Can Help Donating Your Mac

Financing Available

Corporate Leasing Available
90-Day Interest Free Finance

Macintosh Rentals

Security Deposit Required

PM 8500	Mac 7200	PowerBooks	PowerMac G3
16MB/1G HD	8MB/500HD	Starting at	32MB/4GHD
$359	**$199**	**$139**	**$299**
Monthly	Monthly	Monthly	Monthly

Expert Macintosh Repairs

Monitor
•All Makes & Models
•Authorized Radius Service Center
•3-5 Days Turn-Around
•Loaner Available

Macintosh
•All Mac Models Upgrade & Repair
•**Data Recovery**
•Component Level Repair
•While-U-Wait Service
•On-Site Service
•1-2 Days Turn-Around

Printer
•All Makes & Models
•Laser Printers
•Ink Jet Printers
•On-Site Service Available
•3-4 Days Turn-Around
•Loaner Available

Specials

Apple System 8.1 OS	**$99**
Teleport 56K Modem with ***System 8 Free***	**$169**
iomega ZIP Drive	**$139**
Abuse	**$25**
Games of Fame 3	**$20**
Marathon	**$15**
Myth	**$45**
Pathways into Darkness	**$10**
Quake	**$49**
RIVEN	**$49**

RIVEN Arrived!

Bring This Coupon for Special Prices

*No interest for 90 days, call for details. Prices subject to change without notice, not responsible for errors. This Ad Expires June 18, 1998

THE BEST PRICE IN TOWN!

MMX 686 Pentium® II

333MHz	$770
300MHz	$640
266MHz	$510
233MHz	$460

- Intel CPU
- 512K CPU Cache
- Heat Sink & CPU Fan
- 0MB Expandable to 384MB on Board
- 1.44MB Floppy Drive
- Enhanced IDE w/16550 I/O
- ATX Mid-Tower Case
- 104 Enhanced Keyboard

MMX 586 Pentium®

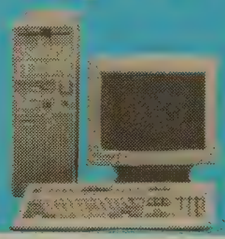
233MHz	$320
200MHz	$290

- Intel Pentium® MMX CPU
- Heat Sink & CPU Fan
- 0MB Expandable to 128MB on Board
- Intel Triton Chipset w/512K Pipeline Cache
- 1.44MB Floppy Drive
- Enhanced IDE w/16550 I/O
- Tower or Desktop Case w/Power Supply
- 104 Enhanced Keyboard

*Prices do not include Hard Disk, Display or RAM

Optional for Systems

PCI SVGA Card 1MB/2MB	$25/35
15" SVGA Monitor w/2MB PCI Card	$215
Non-Interlaced SVGA Monitor (1024x768, .28) w/VESA/PCI SVGA Card 1MB	$170



2.1GB	$135	3.2GB	$155
2.5GB	$145	4.3GB	$180

586 Pentium®

166MHz	$280
150MHz	$275
120MHz	$270

- Intel Pentium® CPU
- Heat Sink & CPU Fan
- 0MB Expandable to 128MB on Board
- Intel Triton Chipset w/512K Pipeline Cache
- 1.44MB Floppy Drive
- Enhanced IDE w/16550 I/O
- Tower or Desktop Case w/Power Supply
- 104 Enhanced Keyboard

K6 AMD

233MHz	$290
200MHz	$280

- AMD CPU
- Heat Sink & CPU Fan
- 0MB Expandable to 128MB on Board
- Intel Triton Chipset w/512K Pipeline Cache
- 1.44MB Floppy Drive
- Enhanced IDE w/16550 I/O
- Tower or Desktop Case w/Power Supply
- 104 Enhanced Keyboard

*Prices do not include Hard Disk, Display or RAM

BELMONT SYSTEMS INC.
(Belmont Computer Products)
1509 Industrial Road, San Carlos, CA 94070

NEW LOCATION Bigger facility to serve you better!

(650) 598-9058
FAX (650) 598-0186
Store Hours: M-F 9-6
Saturday 10-3

PRICE IS NOT ALL WE OFFER:

BEST QUALITY • STRONGEST SUPPORT STAFF • 10 YEARS BUSINESS EXPERIENCE

UPGRADE & REPAIR

For All Brand PC & Compatibles

- Free estimates
- No appointment required
- Same day turnaround

NOVELL

Sales...
Custom Design Service...
Installation and Maintenance...
Extended Software Support...

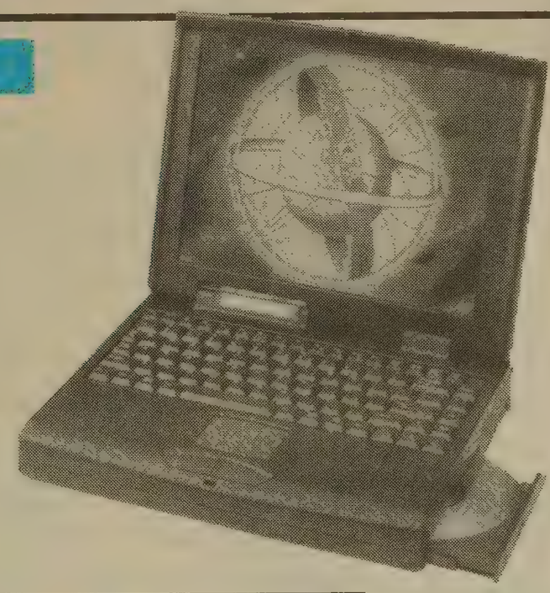
Available through

STEPFORD
1-800-HLP-U-NET

Notebook

- Intel Pentium® CPU
- 32MB RAM
- 2.1 GB Harddisk
- 512K Pipeline - Burst Cache
- 3.5" 1.44MB FDD, Exchangeable w/ optional secondary battery
- 20X CD-ROM
- 2MB PCI Video RAM
- 16-Bit Sound Card w/Speakers
- 3 Type II or 1 Type II & 1 Type III Slots
- NiMH Battery, AC Adapter, Carrying Bag

Optional: 3.2GB Add $50
64MB Add $95
33,600 Fax Modem Add $70
56K Fax Modem Add $115



12.1" Active Matrix

166MMX	$1,750
200MMX	$1,770
233MMX	$1,800

INTERFACE CARDS

Trident SVGA w/1MB RAM	45
PCI SVGA Card 1MB/2MB	35/45
Diamond 3D 4000 2MB	$85
Diamond 3D 4000 4MB	$100
Diamond 3D 2000 PCI 2MB/4MB	65/85
Diamond Stealth II S-220 4MB	100
Matrox Millennium II 4MB	145
IDE I/O w/16550 UART	35
Adaptec 1522	90
Adaptec 2940 PCI SCSI	170
Adaptec 2940UW/Cable	200

Free Installation w/Any Parts Purchased

HARD DISKS

2.0GB	$150
2.5GB	160
3.1GB	170
4.3GB	195
6.4GB	240
8.4GB	345
2.0GB SCSHI	220
4.0GB SCSHI	335

MOTHERBOARD

586-233MHz w/Intel MMX CPU & Fan	$240
586-200MHz w/Intel MMX CPU & Fan	210
586-166MHz w/Intel CPU & Fan	200

SOUND CARDS

16-Bit Sound Card	$35
Sound Blaster 16	50
Sound Blaster AWE 64	80

KEYBOARDS

101 Enhanced Keyboard	$15
Keytronic 104 Key	25
Maxiswitch 101 Key	25

FLOPPY DRIVE

TEAC/Mitsumi 1.44MB 3.5"	30

MISC.

230W Power Supply	$35
Logitech Mouse Man	30
Logi Trackman	50
DFI Mouse (3 Button, Microsoft Comp.)	15
Mini Vertical Case w/PS	45
Med Vertical Case w/PS	65
Full Vertical Case w/PS	85
3.2GB Tape Drive w/TR-3 Cartridge	175
Iomega Jaz SCSI 1.0GB Int.	295
Iomega Zip Dr. 100MB Int w/ Cartridge	105
Iomega Zip Dr. 100MB Cartridge	15
16-Bit Ethernet Card	25
3COM 3C509	60
3COM 3C905 10/100	75
Intel Ether Express Pro 100	70
RAM DIP/SIPP/SIMM	Call

Free Installation w/Any Parts Purchased

CD-ROMS

16XI	$70
24XI	75
32XI	85
12X/16X SCSI	100/100
24X/32X SCSI	110/120

MODEMS

33,600 Fax/Modem V.34	$65
33,600 Fax/Modem Ext V.34	85
56K Fax/Modem	85
US Robotics 33,600 Sportster Int.	95
US Robotics 33,600 Fax Modem w/Voice	105
US Robotics 56K Int.	110
US Robotics 56K Int. w/Voice	130

MONITORS

14" Non-Interlaced	$145
15" NI 1280x1024 .28	180
17" NI 1280x1024 .27	310
Sony 17" 1280x1024 .25	585
ViewSonic G771 V7 1280x1024 .27	430
ViewSonic P775 1600x1280 .25	530

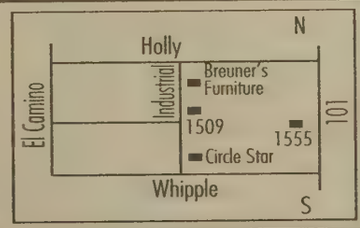
TERMS AND CONDITIONS:

- Company, Government POs Welcome
- UPS Shipping Daily

All Prices and contents subject to change w/o notice.
All brand names are registered trademarks.
Co. Term on Credit approval.

Welcome to visit our showroom!
Computers, Monitors
are now on display!
Prices reflect Cash Discount.

Located in the
San Carlos Commerce
Center Office Park



continued from page 124

Rule #4: Think Globally, Buy Locally

Just because you can now buy something on the Internet doesn't mean that it makes any sense to do so. If, at a car dealership, the salesperson wouldn't let you test drive any of the cars, you would be unlikely to give them your money, right? So, does it make sense to buy a car over the Internet? It might, but you better go to a good, old fashioned, three-dimensional dealership to try one out before you do. And if you do buy that car over the Internet, who will you take it to when it breaks down? It just makes sense to buy some things locally. In addition to supporting the economy in your own backyard, should something not go perfectly with the transaction or its aftermath, talking with someone face to face always beats handling a dicey situation via email. Armed with these four rules, as well as your own common sense, you should be able to go out on the Internet and safely shop till you drop.

When shopping online, you're much safer dealing with established companies such as Amazon.com, Virtual Vineyards, or Apple.

Do Mac Users Surf Slower?

By Sam Penrose

(Editorial concerns have pushed the promised follow-up to last month's assessment of the gaming industry back one issue. Stay tuned for more, and feel free to send your opinions to *MicroTimes_Column@bmug.org* .)

A number of my Mac-loving friends who also use Windows have noticed that their Windows boxes seem to sharply outperform their Macs as Web clients. Lorca Hans, Webmaster at San Francisco State University, reports that he gets "much faster" results from NT 4.0 on a Pentium 166 box than he does on a PowerMac 4400/200 running Mac OS 8 with the same Ethernet connection to the same network. Two computer-savvy friends have asked me about this gap, two more professional associates have asserted that it exists, and it's been the subject of several recent threads in the comp.sys.mac.comm newsgroup. Web browsing has become a basic function for today's computers. Are Macs really suffering from second-rate performance in this critical area, and if so, when can we expect a fix?

Documentation Is Lacking

Unfortunately I don't have access to a Mac/PC test lab, and those who do (*Macworld* or *MacWEEK*) have not looked at the question. They have, however, run some tests which shed indirect light on the possible magnitude of the problem.

Macworld's assessment of throughput on a crop of K56flex and x2 modems (*http://macworld.zdnet.com/pages/articlelinks/15.04.modems.speed.gif*) shows a substantial fall-off when the modem shifts from FTP- to HTTP-based tasks. Nine desktop modems averaged 48.4 Kbps on an FTP download test but only 28.3 Kbps on a Web download test. Web throughput was 40% slower. By itself that figure may mean nothing, since it's unclear how much of the gap is due to the superiority of FTP to HTTP for throughput and the details of the testing setup. None of the three PC-oriented magazines I checked publish HTTP-based test results in their modem roundups, preventing direct comparison. Still, if *Macworld*'s results do not conclusively document users' experience, neither do they contradict it. Also circumstantial but more dramatic are the results *MacWEEK* found last summer when comparing the Web- and file-server functionality of AppleShare IP 5.0 and Open Transport 1.1.2 to that of Windows NT 4.0, available on the Web at *www.zdnet.com/macweek/mw_1127/rv_appleshare.html* . Attached benchmark results show that NT provided four times more throughput as a file server than the Apple solution while handling eight times as many requests as a Web server. Mac OS's shortcomings were doubled when the protocol was HTTP. Web serving is not the same as Web browsing, but test results suggestively congrue with the impressions of sophisticated users.

Possible Causes

The relatively terrible file server performance itself may point to part of the problem. My initial answer to friends who asked me why their Macs seemed slow on the Web was that Mac Web clients were probably suffering from Mac OS's notoriously inefficient file input/output. Web browsing amounts to the process of telling your Mac to fetch a whole bunch of small files from across a network and then assemble them in various ways (in RAM, on your hard drive, on your screen). Windows is a descendant of DOS, aka "Disk Operating System," and it has always been relatively fast at shuttling files around. Meanwhile, Mac OS's File Manager is reportedly still written in 68K code, which would hamper still further the ability of fast PowerPC processors to overcome any inefficiencies in decade-old software.

Other knowledgeable sources have targeted the Macs networking architecture, specifically Open Transport. My attempts to follow up on this angle landed me deep over my head among TCP/IP, Macintosh, and Web professionals whose opinions on OT's merits are as strong as they are mutually antagonistic. I do not know whether OT slows Mac OS's performance on the Web, and those who should know disagree vociferously.

Subjective Evidence Counts

The lack of a smoking gun here is frustrating, but it does not mean that user experience can be simply brushed aside as unsubstantiated. I have to

HKG COMPUTERS

Hardware Knowledge Group, Inc

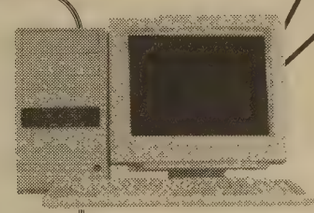
CORPORATE/SMALL BUSINESS/END-USERS

$0 DOWN INSTANT CREDIT

90 Days Same As Cash, O.A.C.*
Please Call For Details

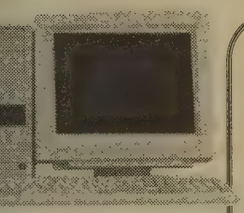
computerific!
Free 3 Hours Training with Each System Purchased

MONTHLY SPECIAL



- ***Intel 430TX Motherboard**
- ***32MB** EDO **Memory**
- *1.44MB Floppy Drive
- ***3.2GB Ultra-IDE DMA/33 Hard Drive**
- *PCI, SVGA 2MB Video Card
- *Creative Labs Sound Blaster 16
- *24X IDE CD-ROM
- *33.6K Int Fax/Modem
- *120W Amplified Speakers
- *Mini-Tower Case w/230W Power Supply
- *104-Key Enhanced Keyboard
- *Logitech Mouse
- *Microsoft Windows 95
- *Monitor not included

INTEL PENTIUM® 166MHz $699 / 200MHzMMX $719

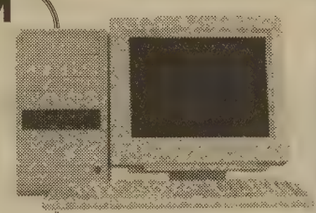


PENTIUM® PROCESSOR WITH MMX TECHNOLOGY-BASED SYSTEMS

- ***Intel 430TX Chipset Motherboard**
- *32MB **SDRAM** Memory
- *1.44MB Floppy Drive
- *4.3GB Ultra-IDE DMA/33 Hard Drive
- ***PCI SVGA 2MB Video Card**
- *15" SVGA Monitor .28 NI
- * 33.6K Int. Fax/Modem
- ***Creative Labs Sound Blaster 16**
- *24X IDE CD-ROM Drive
- *120W Amplified Speakers
- *Mid-Tower Case w/230W Power Supply
- *104-Key Enhanced Keyboard
- *Logitech Mouse
- *Microsoft Windows 95 OSR 2.5

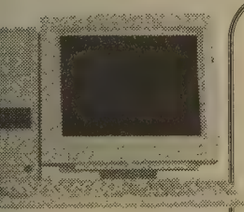
INTEL PENTIUM® 166MHz MMX $969 / 200MHz MMX $979 / 233MHz MMX $999

PENTIUM® II PROCESSOR-BASED SYSYEM



- ***Intel BX Chipset Motherboard for 350/400Mhz**
- *Intel ATLANTA Motherboard for 233/266/300/333Mhz
- ***64MB SDRAM Memory**
- *1.44MB Floppy Drive
- ***6.4GB Ultra-IDE DMA/33 Hard Drive**
- ***Diamond Stealth 3D 4000 AGP**
- ***17" .28 SVGA Monitor**
- ***32X IDE CD-ROM Drive**
- *56K Int Fax/Modem
- *Creative Labs Sound Blaster 64 Value
- *Altec Lansing 45 Speakers Sytem
- *ATX Mid-Tower w/235W Power Supply
- *104-Key Enhanced Keyboard
- *Microsoft Mouse
- ***Microsoft Windows 95 OSR 2.5**

TEL PENTIUM® II 233MHz $1589 / 266MHz $1639 / 300MHz $1769 / 333MHz $1909 / 350MHz & 400 MHz Call

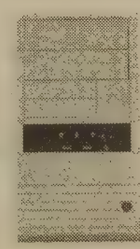


DUAL PENTIUM® II PROCESSOR-BASED SERVER

- ***Intel DK440LX Motherboard**
- ***Integrated UW SCSI Controller**
- ***128MB SDRAM Memory**
- *1.44MB Floppy Drive
- ***4.0GB UltraWide SCSI Hard Drive**
- *PCI, 2MB SVGA Video Card
- *14" SVGA Monitor .28 NI
- *32X SCSI CD-ROM Drive
- *ATX Full-Tower w/300W Power Supply
- *Integrated Sound Card
- *Microsoft Windows NT v.4.0 Workstation
- *Windows NT server v.4.0 w/5 user lic.+$350
- *Windows 95 Keyboard and Logitech Mouse
- *Integrated Fast Ethernet Network Adapter

INTEL PENTIUM® II 2x233MHz $2109 / 2x266MHz $2199 / 2x300MHz $2479 / 2x333MHz $2759

CD-RW SYSTEM



- *Intel 430TX Chipset Motherboard
- *64MB EDO Memory
- *1.44MB Floppy Drive
- *3.2GB Ultra-IDE DMA/33 Hard Drive
- *PCI SVGA 2MB Video Card
- *14" SVGA Monitor .28NI
- *Creative Labs Sound Blaster 16
- *24X IDE CD-ROM Drive
- *HP 7200I CD-RW Drive
- *120W Amplified Speakers
- *Mid Tower Case w/230W Power Supply
- *104-Key Enhanced Keyboard
- *Logitech Mouse
- *Microsoft Windows 95 OSR 2.5

Intel Pentium® 200MHz MMX $1289

- **1-year parts and lifetime labor warranty on all systems**
- **Gift certificates available**
- **Same low price for credit card and cash**
- **Prices and specifications subject to change without notice**
- **Photos in ad may differ from actual systems**
- *** On approval of credit**

DISCOVER VISA MasterCard

HKG/1/M

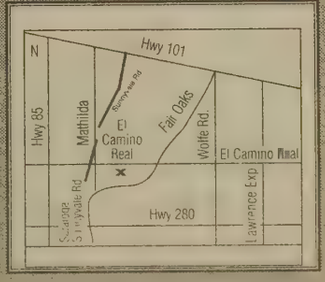
HKG COMPUTERS

- FREE ESTIMATES
- CUSTOMIZED SYSTEMS
- NOVELL WINDOWS NT NETWORKING
- UPGRADES
- HOME PAGE DESIGN
- CORPORATE
- GOVERNMENT
- OEM
- POS ARE WELCOME

Telephone:
408-733-5454
Fax:
408-733-5456
For Orders:
800-308-0818
Hardware Support:
408-733-5457
EMail:
HKGCOMP@aol.com

448 E. El Camino Real
Sunnyvale, CA 94087

Hours: Mon-Fri 9-6
Sat 10-6
Next to Charles Schwab



this date recorded a dozen independent assessments of various Macs as much slower Web clients than comparable Windows machines, most of them unsolicited and several from experienced Mac professionals who make their living with networked Macs. There is a problem, and it affects a key selling point for any computer in 1998. As much as all of us prefer Macs, we're going to have a hard time convincing our friends of their superiority if similar Windows machines browse the Web twice as fast.

Looking Ahead

Whatever the magnitude and causes of this problem, Apple has at least one fix in the pipeline: Rhapsody. Rhapsody is built around UNIX, and UNIX's networking and file I/O offer much better performance and stability than Mac OS or Windows 95. Rhapsody, however, is only part of the story in the near-term. Apple is also throwing substantial resources into developing the latest iteration of Mac OS (known variously as Allegro, 8.2, and 8.5) for release this summer. Allegro reportedly includes a substantial revision to Open Transport and may offer improved file management, but without a firmer grasp on both the nature of the problem and the upcoming changes, it is impossible to speculate on whether the millions of Mac OS customers to whom Apple presumably hopes to sell Allegro will see any improvement in their Web-browsing experience. As I write this column in April, we are still several weeks away from the World Wide Developer Conference, at which Apple has promised to explain much of its product plans for the next year. By the time you read this, those announcements should have been thoroughly worked over in the Mac-oriented press. The key for Mac users concerned about Web performance may be when and in what form they can expect either Rhapsody or new networking and file management architectures for Mac OS to appear. If Rhapsody 1.0 is a $200 product which won't run your productivity apps on your Mac and no one is talking about a leap in Mac OS performance with Allegro, that will not bode well for Mac OS Web surfers, which is to say a huge fraction of the user base.

Web browsing has become a basic function for today's computers. Are Macs really suffering from second-rate performance in this critical area, and if so, when can we expect a fix?

Meanwhile, I will continue to try to nail down the underlying issues; any headway I make will appear in future columns. Feedback or leads are welcome at *MicroTimes_Column@bmug.org* .

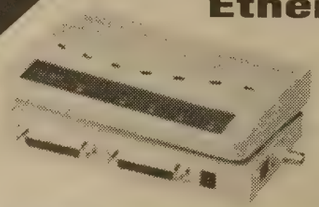
Credits

Ron Hunsinger, Dan Meriwether, and Peter Linde gave critical feedback on early stages of this column. I would also like to express my gratitude to sources who cannot be named. Responsibility for any errors or technical oversights is mine alone. ◆

Copyright © 1998 by Peter Linde and Sam Penrose. All rights reserved.

Ethernet Modem Server $199

GREAT VALUE
CeLAN 2-Port Ethernet Print Server



$149 PLUS
Additional $20 Rebate if you mention this ad before 5/31/98

Fast Ethernet Card $29

MODEL	CeLAN EPS2	HP 150X
Printer Ports	2	1
Network Support • Novell v3.x, 4.x • NT v3.x, 4.x • UNIX	Yes (IPX,IP) Yes (IPX,IP) Yes (IP)	Yes
Price	$149	$199 SRP

Visit our Web site at www.celan.com to see our complete line of networking products.

RESELLERS AND DISTRIBUTORS WANTED

Now Hiring Sales Consultants. Call for Details

Ethernet 16-port 10BaseT Hub $99

1-800-68-CeLAN

Fast Ethernet 8-port Hub $199

CeLAN®
QUALITY NETWORK PRODUCTS

2323 Calle Del Mundo
Santa Clara, CA 95054
USA

Sales: 800-68-CeLAN
Phone: 408-988-8288
Fax: 408-988-8289

Additional CeLAN Product Line

- FlexLINK Ethernet Adapters for ISA, PCI, PCMCIA
- FlexLINK Ethernet Adapters & transceivers for MACs
- FlexHUB Fast Ethernet hubs, switches
- FlexHUB workgroup hubs, switches
- FlexHUBS repeaters, transceivers
- FlexCOM Ethernet CD-ROM servers

InterPro Delivers Unbeatable PC Upgrades Solution !!!

Authorized Distributor — *The Best Price, Service, Quality & Value !!!*

P6BDX-233~400+,Dual P2,440BX,4xPCI/3xISA/AGP/Raid,Dual 7895 SCSI/Enet,ATX..... $ 459
P6BXIS-233~400+,P2,440BX,4xPCI/3xISA/AGP/Raid,2940UW,2xUIDE,USB,Dim.ATX..... $ 319
P6BXI-233-400+,P2,440BX,4xPCI/3xISA/AGP,2xUIDE,4xDim,USB,Award,ATX..... $ 205
P6LDXS-233~333+,Dual P-II,440LX,4xPCI/3xISA/AGP,2940UW/2xUIDE,4xDim.ATX..... $ 329
P6LDX-233~333+,Dual P2,440LX,4xPCI/3xISA/AGP,2xUltra/IDE,4xDim,2xUSB,ATX..... $ 225
P6LXIS-233~333+,P-II,440LX,4xPCI/3xISA/1xAGP,2940UW/2xUIDE,4xDim,USB,ATX..... $ 249
P6LXI-233~333+,P2,440LX,4xPCI/3xISA/AGP,2xUltra/IDE,1/O,4xDim,2xUSB,ATX,Award $ 155
P6NDP-150~200Mhz,Dual/Pro,Natoma,4xPCI/4xEISA/Raid,2940UW SCSI/IO,2S/1P,AMI,S $ 579
P54TXI/S-233MMX/K5/K6,TritonTX,512K,4xPCI/3xISA,2940UW/UIDE/IO,2S/1P,ATX..... $ 215
P54TXI-75~233MMX/K6,Triton TX,512K,4xPCI/4xISA,2xIDE/IO,2S/1P,4x72,AMI,ATX..... $ 109
Adaptec RAID ARO-1130,PCI-to-SCSI MultiChannel Array Adapters (Raid 0,1,5),w/Kit..... $ 215

SUPERMICRO (Made In U.S.A)

P6DBS-233~400+,Dual P2,440BX,4xPCI/3xISA/AGP/Raid,Dual 7895 SCSI,4xDim,ATX..... $ 395
P6DBE-233~400+,Dual P2,440BX,4xPCI/3xISA/AGP,UIDE/IO,2xUSB,4xDim,AMI,ATX..... $ 279
P6SBS-233~400+,P2,440BX,4xPCI/3xISA/AGP/Raid,Dual 7895 SCSI,4xDim,AMI,ATX..... $ 289
P6SBA233~400+,P2,440BX,4xPCI/3xISA/AGP,UIDE/IO,2xUSB,3xDim,AMI,ATX..... $ 159
P6DLH-233~333+,Dual P2,440LX,9xPCI/3xISA,i960rd(IOP),2xIDE/IO,4xDim,Full AT..... $ 639
P6DLS-233~333+,Dual P-II,440LX,4xPCI3xISA,2940UW/IDE/IO,2S/1P,USB,Full ATX..... $ 299
P6DLE-233~333+,Dual P2,440LX,4xPCI/3xISA/AGP,2xUltra/IDE/IO,2S/1P,2xUSB,ATX.... $ 219
P6SLS-233~333+,P2,440LX,4xPCI/3xISA/AGP,2940UW/2xUIDE/IO,2S/1P,4xDim,ATX..... $ 229
P6SLA-233~333+,P2,440LX,4xPCI/3xISA/AGP,2xUlta/IDE/IO,2S/1P,3xDim,2xUSB,ATX.... $ 135
P6SKS-233~300+Mhz,P-II,440FX,4xPCI/4xISA,2940UW/2xIDE/IO,2S/1P,USB,Full ATX.... $ 175
P6SKEII-233~300Mhz,P2,440FX,4xPCI/4xISA,2xIDE/IO,2S/1P,6x72-pin,AMI,ATX,USB..... $ 89
P6DNH2-150~200,Dual/Pro,Natoma,i960,8xPCI/3xISA,2xIDE/IO,2S/1P,8x72-pin,Full AT $ 529
P5MMS98-75~233MMX/K5/K6,430TX,4xPCI/4xISA,2xIDE/IO,2S/1P,4x72-in/2xDimm,AT.. $ 109
P55STE-75~200MMX,TritonII,512K,4xPCI/4xISA,IDE/IO,2S/1P,6x72-pin,USB,baby AT..... $ 79

S-1836Dluna-233~400+,Dual P2,6xPCI/ISA/AGP,Raid Port,Dual 7895 SCSI,4xDim,ATX.. $ 575
S-1832DL-233~400+,Dual P2,5xPCI/2xISA/AGP,2xIDE/IO,2xUSB,4xDim,ATX..... $ 269
S-1846S-233~400+,P2,440BX,5xPCI/2xISA/AGP,3xIDE/IO,2xUSB,3xDim,ATX..... $ 179
S-1696DLUA-233~333+,Dual P2,440LX,4xPCI/2xISA/AGP,Dual 2940UW/2xIDE,ATX..... $ 387
S-1692DL-233~333+,Dual P-II,440LX,5xPCI/2xISA/1xAGP,2xUIDE/IO,4xDim,USB,ATX... $ 249
S-1692SL-233~333+,Single P2,440LX,5xPCI/2xISA/AGP,2xUltra/IDE/IO,4xDim,ATX..... $ 155
S-1592S-75~266Mhz,VIA VP3,512K,4xPCI/3xISA/AGP,UIDE,4xSim/2xDim,2xUSB,ATX..... $ 115
S-1564D-75~233MMX,Dual/P,TritonII,512K,4xPCI/5xISA,2xIDE/IO,2S/1P,8x72,AT..... $ 169
S-1564S-75~233MMX,TritonII,512K,4xPCI/5xISA,2xIDE/IO,2S/1P,8x72-pin,AT..... $ 129
S-1571S-75~233MMX/K5/K6,430TX,512K,5xPCI/4xISA,IDE/IO,2xDim,Simm,AT,Award..... $ 99

MICRONICS Computers Inc.

M1DBH-233~400+,Dual P2,440BX,5xPCI/ISA/AGP,2xIDE/IO,4xDim,ATX..... $ 319
M1SBR-233~400+,P2,440BX,4xPCI/2xISA/AGP,2xIDE/IO,3xDim,2xUSB,ATX..... $ 199
M1DLS-233~333+,Dual PII,440LX,3xPCI/2xISA/AGP,2940UW/IDE,4xDim,ATX..... $ 409
M1SLT-233~333+,PII,440LX,4xPCI/3xISA/AGP,2xIDE/IO,2S/1P,4xDim,USB,ATX.... $ 209
M1DFD-233~300+,Dual PII,440FX,4xPCI/2xISA,2xIDE/IO,2S/1P,4xDimm,ATX..... $ 275
M1SFW-233~300+,P-II,440FX,4xPCI4xISA,2xIDE/IO,2S/1P,4x72/2x168,ATX..... $ 179
M7STA-75~233/K6,430TX,512k,5xPCI/4xISA,IDE/IO,2S/1P,4x72/2xDim,AT or ATX $ 129

(Made By Intel)

SE440BX-233~400+,P2,440BX,PCI/ISA/AGP,2xUIDE/IO,Audio,3xDim,USB,ATX.... $ 215
Dakota-Dual P2,3xPCI/1x2xISA/AGP,2940UW/IDE,2xUSB,4xDim,VGA,PnP,ATX..... $ 479
Atlanta-P-II,440LX,3xPCI/2xISA/1xAGP,2xIDE/IO,2xUSB,3xDimm,Phoenix,ATX..... $ 149
Anchorage-75~233MMX/K6,430TX,512K,3D Yamaha Sound,IDE/IO,ATX..... $ 145

MICRONICS Computers Inc.

M668DS-233~333+ Mhz,Dual P2,LX,3xPCI/4xISA/AGP,2940UW/UIDE,Dim,ATX..... $ 279
M668D-233~333+Mhz,Dual P2,440LX,3xPCI/4xISA/AGP,2xUIDE/IO,,4xDim,ATX.. $ 199
M628-233~333+Mhz,P2,440LX,3xPCI/4xISA/AGP,2xUIDE/IO,4xDim,Award,AT..... $ 149
M581-75~233MMX/K6,SIS5591,1M cahche,4xPCI/3xISA,2xUIDE,4xSim/3xDim,AT.. $ 119

ASUS

P2B-DS-233~400+,Dual P2,440BX,4xPCI/2xISA/AGP,2940UW/S3,IDE/IO,ATX..... $ 429
P2B-D-233~400+,Dual P2,440BX,4xPCI/2xISA/AGP,2xIDE/IO,2xUSB,4xDim,ATX.. $ 329
P2B-S-233~400+,P2,440BX,4xPCI/ISA/AGP,2940UW/S3,IDE/IO,4xDim,USB,ATX.. $ 309
P2B-233~400+,P2,440BX,4xPCI/ISA/AGP,2xIDE/IO,4xDim,2xUSB,ATX..... $ 195
P2L97-DS-233~333+,Dual P-II,440LX,4xPCI/2xISA/1xAGP,2940UW/2xIDE,ATX..... $ 335
P2L97S-233~333+,P2,440LX,4xPCI/2xISA/AGP,2940UW/2xUIDE,3xDim,USB,ATX. $ 265
P2L97-233~333+,P-II,440LX,4xPCI/2xISA/1xAGP,2xIDE,3xDimm,USB,ATX..... $ 145
P5TX97-E-200MMX/K5/K6,TritonTX,512k,4xPCI/3xISA,IDE/IO,2S/1P,4x72/2xDim. $ 119

BIOSTAR

F. I. C (First International Computer)

VB-601-233~400+,P2,440BX,5xPCI/2xISA/AGP,2xIDE/IO,4xDim,2xUSB,ATX..... $ 149
VL-601-233~400+,P4,440LX,5xPCI/2xISA/AGP,2xIDE/IO,3xDim,2xUSB,ATX..... $ 125
VA-503+-75~266+/K6(100Mhz),VP3,1M,3xPCI/3xISA/AGP,2xIDE,Sim/Dim,ATX..... $ 119
PA-2012-75~233MMX/K6,VP3,1M,4xPCI/2xISA/AGP,3xIDE,3xDim,2xUSB,ATX..... $ 105

Gigabyte (Micro International U.S.A w/2-years-Warranty)

GA-6DLX-233~333+,DualP2,LX,4xPCI/3xISA/AGP/Raid,2940UW/IDE,4xDim,ATX. $ 275
GA-6DL2-233~333+,Dual P2,LX,4xPCI/3xISA/AGP,UIDE,4xDim,Award,ATX..... $ 229
GA-SLX-233~333+,P2,440LX,4xPCI/2xISA/AGP,2940UW/IDE,4xDim,Award,ATX.... $ 249
GA-6BLX-233~333+,P2,440LX,4xPCI/2xISA/AGP,2xUIDE/IO,4xDim,Award,AT..... $ 139
GA-5SG-75~233MMX/K6,SIS5591,512k,4xPCI/2xISA/AGP,UIDE/IO,Sim/Dim,AT..... $ 99

The best place in Town to upgrade your PC

STOP Search no more !!

Call our Technical Sales to assist you with Customizing computer systems according to your special requirements

* *Build yourself or*
* *We can do it for you*

586 PCI WIN 95' STATION

*Pentium 100~233MMX CPU w/fan
*VIA VP3,PCI/ISA/AGP,w/1MSyn.
*32MB/10ns,168-pin SDram
*Ultra/IDE w/2S/1P/1G,2xUSB
*3.2GB Ultra IDE Hard Drive
*1.44MB Floppy Drive
*33.6 Fax/Data/Voice Modem.
*3D Sound card w/240W Speaker
*14" Flat Screen NI 1024x768.28
*Trident TG9753D AGP w/4MB SGRAM
*Mini-Tower Case w/250W P.S
*24X Speed IDE CD-ROM
*Keyboard & MS-Mouse
*Windows 95' Installed.

AMD K6-200/233 AMD ..... $799/$829
AMD K6-266/300 ..... $899/$999
Cyrix M2-200+/233+ Mhz ..... $789/$819
Pentium-166/200 Mhz ..... $819/$859
Pentium-166/200 MMX Mhz ..... $839/$859
Pnetiurh-233MMX Mhz $879

POWER P5 SERVER

Dual Pentium 75-200Mhz Ready
*PCI/EISA Slots,w/512K Syn. Cache
*Intel Triton II Chipset.
*64MB/60ns EDO (upto 512K)
*Adaptec 2940UW,Ultra/Wide SCSI
*4.3GB Ultra Wide SCSI-3 Hard Drive
*32x Speed SCSI CD-Rom
*3Com PCI 10/100 BTX network card.
*14" SVGA 1024x768.28dp
*MS-Mouse,104 Keyboard
*64-Bit PCI SVGA,1.44MB Floppy
*Mid-Tower Case w/250 W P.S

Designed for: Novell, UNIX, Win NT

DUAL PCI/EISA: (AIR P5TDP)

DUAL P-133/166 ..... $1489/$1519
DUAL P-166/200MMX ..... $1549/$1579
DUAL P-233MMX $1619

DUAL PCI/ISA: (Tyan S-1564D)

DUAL P-133/166 ..... $1299/$1329
DUAL P-166/200MMX ..... $1359/$1379
DUAL P-233MMX $1439

Dual NT SERVER

*Intel Pentium-II 233~333 CPU w/fan
*Intel 440LX,4xPCI/3xISA/AGP,w/ATX
*2xUltra IDE/IO (33MB/Sec),2S/1P
*32MB SDRAM Memory (100Mhz)
*3.2GB Ultra/33Mb/IDE hard disk
*16-Bit 3D Sound Card w/PnP
*240W Hi-Fi Stereo Speaker,w/Retail
*Diamond Supra 56K Fax/Voice Modem
*32x Speed IDE CD-ROM
*Teac 31/2",1.44MB Floppy Drive
*Mid-Tower,w/250W (ATX)
*MS-Mouse & 104 keys Keyboard
*3D AGP VGA Card w/4MB SGRAM
*MS-Windows 95" Installed (licensed)

Pentium-II-233Mhz,w/512k cache... $889
Pentium-II-266Mhz,w/512k cache... $939
Pentium-II-300Mhz,w/512k cache... $1059
Pentium-II-333Mhz,w/512k cache... $1199
Upgrade to SCSI..... $Call

Pentium-II Station

*Intel Pentium-II 233~333 CPU w/fan
*Intel 440BX,4xPCI/3xISA/AGP,w/ATX
*2xUltra IDE/IO (33MB/Sec),2S/1P
*64MB SDRAM Memory (100Mhz)
*6.4GB Ultra/33Mb/IDE hard disk
*16-Bit 3D Sound Card w/PnP
*240W Hi-Fi Stereo Speaker,w/Retail
*Diamond Supra 56K Fax/Voice Modem
*32x Speed IDE CD-ROM
*Teac 31/2",1.44MB Floppy Drive
*Mid-Tower,w/250W (ATX)
*MS-Mouse & 104 keys Keyboard
*3D AGP VGA Card w/4MB SGRAM
*MS-Windows 95" Installed (licensed)

Pentium-II-233Mhz,w/512k cache... $1049
Pentium-II-266Mhz,w/512k cache... $1099
Pentium-II-300Mhz,w/512k cache... $1229
Pentium-II-333Mhz,w/512k cache... $1369
Pentium-II-350Mhz,w/512k cache... $1479
Pentium-II-400Mhz,w/512k cache... $1699
Upgrade to SCSI..... $Call

Dream Machine

*Dual Pentium-II w/440BX chip,CPU Ready
*64MB SDRAM Memory (100Mhz)
*2xUltra IDE/IO (33MB/Sec),2S/1P
*Adapted Dual 7895 UW/S3 (80Mb/Sec)
*4.5GB Ultra/Wide SCSI-3 Hard disk
*Iomega 100MB IDE Zip Drive + Tools
*US Rob Sportster 56K Data/Fax Modem
*Creative Lab AWE64 PnP
*Yamaha Stereo Speaker,w/Retail
*ATI Xpert@Play (PC2TV) AGP w/8MS Grm
*32x Speed IDE CD-ROM
*Teac 31/2",1.44MB Floppy Drive
*Mid-Tower,w/250W (ATX)
*MS-Mouse & 104 keys Keyboard
*MS-Windows NT 4.0 Installed (licensed)

Dual Pentium-II-233Mhz,w/512k... $1999
Dual Pentium-II-266Mhz,w/512k... $2099
Dual Pentium-II-300Mhz,w/512k... $2359
Dual Pentium-II-333Mhz,w/512k... $2649
Dual Pentium-II-350Mhz,w/512k... $2859
Dual Pentium-II-400Mhz,w/512k... $3289

intel AMD Cyrix

Intel P2-350/400 ..... $609/$829
Intel P2-300/333 ..... $375/$509
Intel P2-233/266 ..... $209/$255
Intel Pro-180/200 ..... $149/$319
Intel MMX-166/200/233 ..... $109/$119/$139
Intel P-166/200 ..... $109/$139
Intel P-100/120/133 ..... $69/$89/$105
Cyrix M2-200+/233+ ..... $69/$89
AMD K6-233/266/300 ..... $99/$175/$259
4/8/16MB/60ns/EDO ..... $12/$19/$32
32/64/128MB/60ns/EDO ..... $49/$139/$259
168pin Sdrm-32/64/128MB ..... $49/$109/$229

Please Call for New Daily Prices

VIDEO CARDS

ATI matrox Number Nine DIAMOND

All-In-Wonder Pro PCI 4/8MB ..... $209/$249
All-In-Wonder Pro AGP 4/8MB ..... $225/$269
ATI Xpert@Work 4/8MB/PCI ..... $89/$115
ATI Xpert@Work 4/8MB/AGP ..... $95/$119
ATI Xpert@Play PCI 4/8MB ..... $99/$129
ATI Xpert@Play 4/8MB/AGP ..... $105/$135
Fire GL 1000 Pro 4/8MB/PCI ..... $129/$169
Fire GL 1000 Pro 4/8MB/AGP ..... $145/$179
Viper 330 4MB PCI/AGP ..... $115/$119
Diamond 3D Pro PCI 2/4MB ..... $55/$67
Diamond Monster 3D II-8/12M $225/Call
Matrox Millennium II 4/8MB/AGP ..... $129/$189
Matrox Millennium II 4/8MB/PCI ..... $125/$185
Matrox Mystique 220 2/4MB ..... $59/$89
#9 Revolution 3D 4/8MB/PCI,w/Wm..$169/$209
#9 Revolution 3D 4/8MB/AGP,w/SG..$189/$229
Trident T975,3D AGP w/4MB SGram $49

CD-ROM DRIVES

Toshiba DVD Rom/Quadrant MPEG2 ..... $439
Toshiba 6201B,9.99ms,32x SCSI/Int $115
Toshiba 6202,99ms,32x,IDE/Int $79
Mitsumi-FX320S,32x,99ms,IDE $78
Creative Labs PC-DVD Encore Dxr2 kit $279
Sony CD-928E C,2xW/8xRRewriteable $359
Yamaha RW4260T,4X2X6RewritableSCSI..$519
Teac CD532S,32x,SCSI,Int $109
Teac CD532E,32x IDE/Int $79
Plextor-32CSI,115ms,12X,SCSI/Cady $239

MultiMedia

Sound Blaster 16/AWE64 ..... $39/$69
US Rob Sportster 56K Int/Ext ..... $119/$179
US Rob Sportster 33.6 Int/Ext ..... $89/$149
Diamond Supra 33.6/56K w/Voice ..... $49/$79

Backup/Network/Controller

Adaptec 2940U SCSI PCI w/kit $159
Adaptec 2940UW,Ultra/Wide SCSI/kit $179
3Com-3C900 PCI Combo $79
3Com-3C905BTX/10/100 PCI $69
Intel Etherxprs Pro 10/100,PCI/TP $59
HP-C1554,4mm Dat 12/24 GB SCSI ..$1089
HP-C1599A,4mm Dat,8GB SCSI Int $729
HP-C1536,4mm Dat 4 GB SCSI Int $579
HP-T3000,3.2 GB TR3 Tape backup $175
HP-T4000T,4/8 GB TR4 SCSI $365
HP-4345,2.5/5GB IDE Tape backup $219

Seagate Tape Backup Drive:

STT28000A,4/8GB TR4,IDE $239
STT28000N,4/8GB TR4,SCSI $279
STD24000N,2/4GB,DDS-2,SCSI $549
STD28000N,4/8GB DDS-2,SCSI $659
STD224000N,12/24GB,DDS-3SCSI $889

DigiView On Sale

1435,14",1024x768,.28,N/I $135
1510,15" 1280x1024,.28,N/I $185
1707+17",1280x1024,.28,N/I $309

NOKIA

447Z17",1024x768,.28dpi,N/I $475
447XAV,17",1600x1280,.25N/I,Spkr/TCO..$679
447Xi,17"1600x1280,.25N/I,Sonytube $619
446Xpro,19",21,1600x1280,.21,N/I $995
445XAV,21",1600x1280,.26N/I $1498
445XI21"1600x1200,.22,TCO95 ..... $1379
445XIPro,21",1800x1440,.22MP $1549

SONY

CPD-100ES 15" 1280x1024,.25,60Mhz $309
CPD-100GS,15"1280x1024,.25,N/I $359
CPD-200ES,17",1280x1024,.25N/I,60hz..$579
CPD-200GS,17",1280x1024,.25N/I $639
GDM-200PS,17",1600x1280,.25N/I $799
GDM-400PS,19",1600x1280,.25N/I $989
20SE2T,20"1600x1200,.25N/I $1495
GDM-500PS,21",1600x1200,.28N/I $1398

NEC

A500,15"1280x1024,.28,N/I $275
E500,15",1280x1024,.25 N/I $319
A700,17",1280x1024,.28N/I $485
E700,17",1600x1280,.25N/I $579
P750,17",1600 x1200,.25,N/I $779
E900,19",1600x1280,.26,N/I $879
E1100,21",1600x1280,.28,N/I $1179

HITACHI

CM500,15",Flat,1280x1024,.28,65hz $269
CM620U,17",Flat,1280x1024,.28,N/I $498
CM751U,19",1600x1200,.26,N/I,75Mhz $879
CM800U,21",1600x1200,.22N/I $1159
CM802U-511,21",1600x1200,.22 ..... $1259
CM803U,21",1800x1440,.22,77hz $1549

IMPRESSION

3Plus 14" 1024x768,.28N/I $159
5Plus 15",1280x1024,.28N/I $199
7Plus 17",1280x1024,.28N/I $398
Vienna Pro 17",1600x1280,.26N/I $559

ViewSonic

E641,14",1024x768,.28,N/I $185
E655,15",1280x1024,.28N/I $259
15GA,15",1280x1024,.28NI,Speakers $349
P655,15",1024x768,.28N/I $299
E771,17",1280x1024,.28,N/I $397
EA771,17",1280x1024,.28,N/I,PnP $475
GA771 17"1280x1024,.27N/I,PnP,w/Spkr$519
G771,17"1280x1024,.27N/I $449
P775,17",1600x1280,.25N/I $539
PT771,17",1600x1280,.25N/I $619
PT77517"1600x1280,.25,w/SonicTRon..$675
G790,19"1600x1200,.26N/I,75hz $829
G800 20"1600x1280,.28 N/I $959
G81021"1600x1280,.25N/I $1019
P810,21"1600x1280,.25N/I $1119
P815,21"1800x1440,.25N/I $1265

MAG

DX500T 1280x768,.25N/I $329
DJ530 15" 1280x1024,.28,N/I $259
DJ700 17" 1280x1024,.26,N/I,60hz $479
DX700T 17" 1280x1024,.25,w/Sonytube..$519
DJ702E 17" 1280x1024,.26,65hz $459
DJ800 19" 1600x1200,.26 ..... $759

Fast Ethernet Hub

H2TX 2 Port switching hub,1x/10/100 349
H4TX/S 4 Port Fast Ethernet 100TX Hub..$259
H5TX,5 Port Fast Ethernet 100TX Hub...$275
H8TX,8 Port Fast Ethernet 100TX Hub...$329
H8TX/S,8 Port 100TX Stackable Hub $398
H12TX/S,12 Port 100TX Stackable Hub...$529

IOMEGA

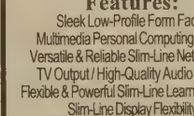
Jazz Drive 1GB SCSI Int/Ext ..... $275/$369
Zip Drive 100MB w/IDE/oem/kit $99
Zip Drive 100MB Parallel $149
Zip Drive 100MB SCSI Int/Ext ..... $125/$149

Seagate Quantum Maxtor WESTERN DIGITAL

IBM-DCAS32160W,2GB,UW/S3,8.5ms $189
IBM-DCAS34330W,4.3GB,UW/S3,8.5ms $289
IBM-DHEA-36480A,6.4GB,9.5ms,UIDE $235
IBM-DHEA-38451A,8.4GBUIDE/9.5ms $339
IBM-DCHS-39130W,9.1GB,UW/S3,8ms $698
IBM-DGHS-318220W,18GB,UW/S3 ..... $1799
WD22100A,2100MB,EIDE,12ms,128k $145
WD33200A,3.2GB,EIDE,12ms,128k $159
WD34004.3GB,EIDE,12ms,128k $189
WD36400A,6.4GB,10ms,UIDE $249
WD4360,4.3GB,UW/S3,8ms,512k,7200r $449
Fujitsu-3064TU,6.4GB,UIDE,10ms $229
Fujitsu-2954QAU,4GB,UW/S3,7200 ..... $429
Fujitsu-2949QAU,9.1GB,UW/S3,7200 ..... $669
Maxtor 84320A,4.3GB,10ms UIDE $179
Maxtor 86480D,6.4GB,10ms UIDE $239
Maxtor 88400D,8.4GB,10ms UIDE $329
Quantum-32160A,2.1GB,12ms,UIDE $149
Quantum-33240A,3.2GB,10ms,UIDE $185
Quantum-34320A,4.3GB,10ms,UIDE $199
Quantum-36480A,6.4GB,10ms,UIDE $269
Quantum-38400A,8.4GB,10ms,UIDE $349
Quantum-32275SW,2.2GB,UW/S3,7200 ..... $199
Quantum-34550SW4,5GBUW/S3,8ms $439
Quantum-36400S,6.4GB,8ms,SCSI $379
Quantum-39100,9.1GB,8ms,UW/S3 ..... $749
Seagate-36451A,6.4GB,10ms,UIDE $269
Seagate-32272W,2.1GB,UW/S3,8ms $349
Seagate-32155W,2.1GB,UW/S3,9ms $275
Seagate-34572W,4.3GB,UW/S3,8ms $489
Seagate-34501W,4.5GB,UW/S3Cheetah $598
Seagate-19101W,9.1GB,UW/S3Cheetah $959
Seagate-39173W,9.1GB,UW/S3,8ms $799
Seagate-118273W,18GB,UW/S3,8ms $1599

MediaGX Databook

New



Only $499

Features:

Sleek Low-Profile Form Factor
Multimedia Personal Computing Center
Versatile & Reliable Slim-Line Network PC
TV Output / High-Quality Audio Center
Flexible & Powerful Slim-Line Learning Center
Slim-Line Display Flexibility
Slim-Line Point of Sale Solution

Specifications

*PCI/ISA Motherboard w/512k cache
*Cyrix MediaGX/GX86-133Mhz
*16MB EDO (4x72-pin Simm socket)
*Integrated PCI VGA controller
*2S/1P, PS/2, USB, 1x RF TV, MIC
*2.1GB enhanced hard disk
*Standard 3.5" 1.44MB mode 3
*Integrated 16-bit PnP Sound Card
*RF TV output & 2x USB
*33.6 Data/Fax Modem w/internal
*24x Speed IDE CD-Rom
*Slim case w/Power Supply (50W)
*2-Bottom PS/2 mouse
*104 keys enhanced keyboard
*MS-Windows 95" CD & Manual (licensed)

Cyrix Media GX-200Mhz CPU..$ 619
Cyrix Media GX-180Mhz CPU..$ 589
Cyrix Media GX-166Mhz CPU..$ 539

InterPro Microsystems Inc. Since 1993

Reseller & Quantity Pricing Available

Term & Conditions:
Knowledgeable tech-suport engineers in service. One year Parts & Labor Warranty. Warranty does not cover software problem. No responsible for typos. Prices,Specificatoin Availability subject to change w/o notice. P.O & Net Term subject to credit approvals. FOB Fremont. Return items are subject to 15% restocking fees. All returned items must has a RMA # & a copy of invoice.

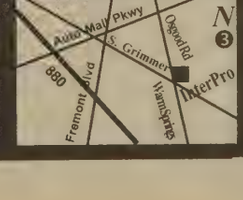
Hours of Operation: M-F 8:00 am - 6:00 pm
Saturday: 10:00 a.m. - 2:30 pm P.S.T

800-226-7216
No Surcharge,Cash Discount Available

Purchase Orders | VISA | COD

44920 Osgood Road,
Fremont CA 94539
TEL: (510) 226-7226 FAX: (510) 226-7219

Go Online
Come Visit Our New Web Site:
//www.interpromicro.com



Avoiding The Telephone

Faster, More Accurate, And More Complete—Use The Internet

By John S. Quarterman

The telephone does have its uses, which are mainly for conveying emotion. If you're interested in information, it's a slow, cumbersome, analog, archaic, and outdated device.

When my elderly aunt was flying back from Mexico to Tennessee, she wasn't on the first flight (just like when she came back from Hawaii). This perturbed some of my relatives. I knew this, because they sent mail to the family mailing list, and I got it, like all the rest of us. Some were frantically calling the airline. This typically took five or ten minutes each time to try to get an actual agent on the line and to inquire.

Instead, I just used *www.aa.com* and looked under Flight Schedules. American Airlines, like most airlines these days, keeps not only schedules but actual up-to-the-minute advisories on their Web server. That, plus a few looks at *www.weather.com* , established that the elderly aunt was stuck at Dallas-Fort Worth Airport (DFW) because of weather. A tap of the Netscape Reload button from time to time gave me updates as the flight departure time was changed, and as it eventually departed, its projected arrival time and its actual arrival time. Meanwhile I watched the weather at DFW and in Nashville.

This is an example of using the Internet to avoid the telephone. The telephone does have its uses, which are mainly for conveying emotion. If you're interested in information, it's a slow, cumbersome, analog, archaic, and outdated device. The Internet is generally faster, more accurate, and more complete.

I also use the Web for booking airline flights. Well, sometimes. I would use *www.delta-air.com* because it looks really nifty. Or, rather, it l o o o k k s s s s really n ii ff tt yyyyyyyyy.... If Delta Airlines ever upgrades its site to use a server that's fast enough to handle the traffic, I'll use it more. Last time I tried it, a fifteen minute wait to get somebody on the Delta technical support 800 number was faster, which is the kiss of death for an online service as far as I'm concerned.

Airlines and other traditional industries have a hard time with the pace of change that the Internet produces and expects. Delta told me that they were planning an upgrade in about six months. I almost dropped the telephone, I was laughing so hard. I'm sure they'll do it faster than that.

Another way to use the Internet—to avoid the telephone and to avoid even telephone books—is to look up telephone numbers and postal addresses. In the old days (3 or 4 years ago), to find a random telephone number in another city you'd probably have to go to the public library and dig through mounds of paper telephone books. Nowadays, just use *www.switchboard.com* . It's not comprehensive, but it finds most numbers I want to use. I admit I often use it even for numbers in Austin, where I live, because it's faster than getting the telephone book off the shelf and flipping through it.

Another good service along these lines is *www.four11.com* . This one is more oriented towards online information, and generally includes electronic mail addresses, in addition to telephone numbers. Since I live by electronic mail, it's very useful.

The usual Web directories are also good for personal lookups. Last week, I located a job candidate in Boston that way; *www.altavista.digital.com* .

Do you have an obscure disease? Has your doctor recommended a drug you're not familiar with? Use the Net, Luke! You want to be a bit careful to notice what server you're getting the information from, but a few Altavista searches can save you a lot of later agony. Doctors are overworked and (claim to be) underpaid, and they often don't look up the third known side-effect of a medicine. Nevermind it may happen to be night sweats, swollen lymph nodes, and eventual death. You, on the other hand, just might want to know about such symptoms, especially if you happen to have them. From bursitis to prednizone, you can find information about it online.

Not only that, you can find indexes of prestigious medical journals. You may still have to go to a library to get the actual article, but once you know which double-blind study was published in which issue of *The Lancet* or *The New England Journal of Medicine*, it's amazing how more likely a doctor is to pay attention to your opinion on the subject of the article. My mother lived six

We Will Meet or Beat Any Advertised Price...
Your Network Specialists - Callan Corp.

NOVELL, NT, UNIX • SYSTEM INTEGRATION • UPGRADE • INTERNET WORLD WIDE WEB • E-MAIL SERVER
FTP SERVER • DNS SETUP AND CONSULTATION • CUSTOMIZED HOME PAGE • DESIGN AND SETUP

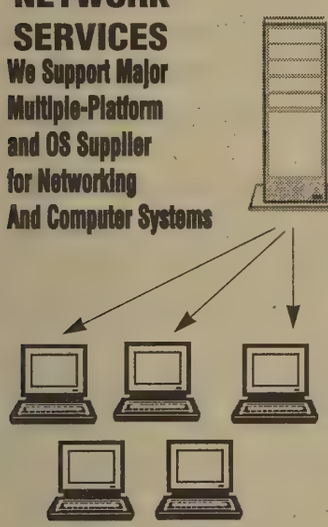
SPECIALIZED HARDWARE	NETWORK SERVICES	INTERNET SERVICES	PROGRAMMING SERVICES	APPLICATION SOFTWARE
• NT Servers • Novell Servers • RAID Servers • Application Servers • Backup Servers • Customized Configuration Available	• Novell, NT & UNIX • Network Integration • LAN/WAN Design & Implementation • Network Maintenance • Hardware On-site Services • Remote Diagnostic Support • Cable Installation & Troubleshooting	• Site Planning and Preparation • Gateway Solution Consulting • Equipment Provisioning • Hardware & Software • Configuration • Complete Internet Solutions	• Internal and Contract • Programming Services • Software Integration • Consultation	***Support and Implementation for All*** • Microsoft® Products • Vertical Turnkey Solutions • Custom Database Solutions

BEST PRICES IN TOWN ON:

DATA/PHONE CABLING EXPERTS
Complete Panasonic Product Line

• Fast Ethernet 10/100 MegaBit Cards • Fast Ethernet Hubs PC Card • Remote Access • WAN Connectivity • E-mail • Internet Solutions • Network Printing Solutions • Network Fax Solutions • Uninterruptible Power Supplies • Ethernet Switches • Server Mirroring • Windows NT Solutions • Tape Backup Solutions

NETWORK SERVICES
We Support Major Multiple-Platform and OS Supplier for Networking And Computer Systems



AUTHORIZED DEALER

PANASONIC PHONE SYSTEM
Digital Super Hybrid Telephone System Call
KX-TD816/KX-TD1232 . . . . . Call
Voice Processing System KX-TVS200: Call
Hybrid System Telephone 7000 Series Call
Digital Super Hybrid System Telephones 7200 Series . . . . . Call

CABLE
LEVEL 3/5 1000FT Cable . . . . . Call
BNC RG 58 100FT cable . . . . . Call
Patch Cable 3'/7'/14'/25'ft. . . . . Call
Patch Panel 24/48/96 port . . . . . Call
19" Floor Mount 7' Rack. . . . . Call
BNC, 10 BASE cable . . . . . Call

NETWORKING OPTIONS
NE 2000 Compatible Jumperless 16bit $18
9port Hub (810 Base T+1COAX) $65
16 port hub (16 RJ45,1 BNC+1AUI) . $110

3Com® CARD & HUB
NETWORK CARD*
3C509-B-TPO/Combo. $59/78
3C905 TX 10/100 10 Base T. . $65
3C589 PCMCIA Lan Adapter. . . . Call
HUB
3C250B Superstark 12 port 100 BST Call
3C16406 Superstark 24 Autosense. Call
3C16610 Superstark 12 Autosense . Call

intel. CARDS & HUB
NETWORK CARD
Intel PILA 8465B PCI 10/100 MBPS $57
HUB
Intel Inbusiness Fast Hub 4 port/8 port/ 8 port plus . . . . . Call
Intel Business Switch 8port/8port plus Call
Intel Business Internet Station . . . . Call

PRINTER SERVER
HP Jet Direct Card/External single port/3 port . . . . . Call
Intel Netportexpress Pro/100/external single port/3 port. . . . . Call

CISCO SYSTEMS ROUTERS
Asend p50 DX/P75/P130 . . . . . Call
CISCO 2501/2514/2524/4500 . Call

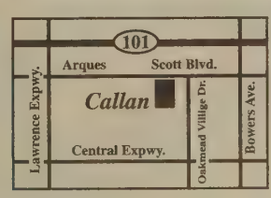
UPS (Uninterruptible Power Supplies)
APC Smart-ups 700
NET/1000NET/1400NT

HEWLETT PACKARD
DESKTOP
Kayak XA p2-233 MMX/266MMX Call
Vectra Ve3 Pent-166MMX . . . . . Call
Vectra VL5 Pent-166MMX/200/200MMX . Call
Vectra VL6 P2-233MMX/266MMX Call
Vectra XA Pent-166MMX/200MMX/233MMX/PRO200 Call
TOWER
Kayak XA P2-233MMX/266MMX/P2 300MMX . . . . . Call
Kayak XU Dual P2-300MMX/P2-266MMX/300MMX . . . . . Call
Kayak Xw Dual P2-300/P2-266MMX/300MMX . . . . . Call
Vectra VL5 Pent-166MMX/200MMX/233MMX. . . Call
Vectra VL6 P2-233MMX/266MMX/300MMX. . Call
Vectra XA Pent-166MMX/200MMX/233MMX/Pro200 . Call
Vectra Xw PPRO200 . . . . . Call
SERVER
Netserver E45 P2-233/266 . . . . Call
Netserver LH PPRO-200 . . . . . Call
Netserver LX Dual PPRO-200 . . . Call
Netserver LXR PPRO-200. . . . . Call
NOTEBOOK
Omnibook
2000CS/2000CT/5700CT/5700CTX/800CT. . . . . Call

COMPAQ
DESKTOP
DeskPro
2000/4000/4000N/4000S/6000Call
ProSignia 200 . . . . . Call
TOWER
DeskPro 200 MT/2000/4000/6000MT Call
ProSignia 200 . . . . . Call
SERVER
ProLiant
2500/2500R/5000R/6000/6500/7000. . . . . Call
NOTEBOOK
Armada
1530DM/1540DM/1550DMT/1580DMT/1590DMT . . . . . Call
Armada 4131T/4150/4160T . . . Call
Armada
7330T/7350MT///10MT/7730MT/7750MT/7770MT . . . . . Call

COMPAQ IBM® Novell Gold Authorized Reseller intel. HEWLETT PACKARD PANDUIT Panasonic

CALLAN CORPORATION



3350 Scott Blvd., Building 1503, Santa Clara, CA 95054

1-888-483-4-LAN • 408-986-9786 • Fax: 408-986-9785

Web Page: http://www.callancorp.com • E-mail: Fred@callancorp.com

Business Hours: Monday-Friday 9:00 am to 6:pm, Saturday 10:00 am to 4:00 pm (PST)

Callan Corporation 1-888-483-4-LAN Network Specialist

CompuMall
Your Premier Computer Source
computerstogo.com
Your Prime -Time
Discount Source of
Name Brand Laptops...
SALE TOSHIBA SALE
T-730XCDT* P150MMX, 12.1" TFT, 28.8 Fax/Mod. 3-Years Warranty
T-2400CS/2400CT 486DX2-50 ___ $545/645
T-220CDS* P133, 16/1.4GB , 12.1" ___ $995*
T-300CT P133, 16/1.6GB, 11.3" TFT ___ $1459
T-440CDX* P133MX, 16/1.34GB, 10xCD 12.1" FSTN $925*
T-445CDT* P133MX, 16/1.34GB, 10xCD 12.1" TFT $1195*
T-510CDT* P133, 16/2.1GB, 10xCD, Fax, 12.1" TFT $1145*
T-660CDT* P150, 16/1.3GB, 10xCD11.3" TFT ___ $1595*
740CDT* P166MMX, 16/3.2GB, CD, Fax, 13.3" TFT $1925*
750CDT* P233MMX, 32/5GB, CD 13.3" TFT ___ $3195*
Port Replicators PA2703U for 3400/3600/PA2717U NoteDock III ___ $145/379
PA2710UX DeskStation V+ New/Refurb ___ $795/575*
Armada 7790DMT P233MMX, 13.3" TFT
Armada 7770DMT P233MMX, 12.1" TFT
COMPAQ
Armada 4100 Series Mobile Expansion 8XCD-ROM $125
Armada 7750MT P166MMX 16-2.1, 12.1" TFT ___ $2095
Armada 7330T P150MMX 16-2.1, 12.1" TFT ___ $1349
Armada 4131T P133 16-1.4, 8xCD, 12.1" TFT ___ $1245
Armada 4150 P150MMX 16-1.6, 12.1" DSTN ___ $1095
Armada 1590DMT P166MMX 16-2.1, 20xCD, 12.1"TFT $2195
Presario 1621 233MMX 32-2.1, 20xCD, 12.1" DSTN ___ $1895
LTE Elite 5280 P120, 16/1.3GB, 11.3" TFT ___ $1195
ThinkPad 380D P150, 12.1" DSTN
IBM ThinkPads
TP 380XD P266MMX 32-5GB, 24xCD, 12.1" TFT ___ $2995
TP 380ED P166MMX 16-3GB, 20xCD, 12.1" TFT ___ $1995
TP 380ED P166MMX 16-2.1GB, 20xCD, 12.1" DSTN $1525
TP 380D P150MMX 16-2.1GB, CD, 12.1" TFT ___ $1349
TP 770 P233MMX 32-5GB, 14.1" TFT ___ $4295
TP 770 P233MMX 32-4GB, 13.3" TFT ___ $3295
TP all models in stock. Best Price! ___ CALL
IRIS Laptop P150 16-1GB, 8x CD, 11.3" TFT Active ___ $995
XEROX DocuPrint Printers 1 YEAR ON SITE /EXPRESS EXCHANGE WARRANTY
THE DOCUMENT COMPANY XEROX
4508 8ppm, 600dpi, 2MB RAM ___ $535
4512/4512N 12ppm, 600dpi, 4MB RAM ___ $865/1115
4517/4517MPS 17ppm, 1200dpi ___ $949/1125
N24 24ppm, 600dpi, 12MB RAM, prints 11x17" ___ $2195
C55 Color Laser 12ppm, 600dpi, 30MB RAM ___ $2875
Extensa™ 660CDT P133, 10xCD, 11.3" Active Color
TEXAS INSTRUMENTS
Extensa 900T P133 16-1.3GB, 11.3" TFT, 4.8Lbs. ___ $895
Extensa 391T P150 MMX 16-2GB, 20xCD, 12.1" TFT ___ $1199
Extensa 670CD P166MMX 16-1.6BG, CD, 12.1" DSTN $1349
LaserWriter 16/600PS* MAC & PC
Apple
PB. 1400C 603e/166MHz
PB. 2400C 603e/180MHz
PowerBook G3/300 64-4GB-24xCD ___ $3095
PowerBook G3/250 32-5GB, 20xCD ___ $3999
PowerBook 3400c/200 16-2GB, CD ___ $2495
PowerBook 3400c/240 16-3GB, CD ___ $2695
PowerBook 1400cs/166 16-1.3GB, CD ___ $1495
PoweMac Desktops _ In Stock. Best Deals!
1-800-977-5665
Tel:(818)-787-3282 Fax:(818)787-2111
e-mail:cmsales@compumall.com
Micro#042798 II

months longer than she might have and in better health because of exactly that technique.

Need a loan? No, ignore all that spam you get. Ask your banker for an electronic mail address. Or use the Web to find the banker first. Your banker doesn't have one? Find another banker. Same for mortgage agencies.

Does your spouse have a midnight urge for cheese blintzes? You can find numerous recipes for various types of them, including the right kind of cheese (there are two: The right kind, and the wrong kind). You still have to go to the grocery store for the ingredients, but at least you can make up your shopping list.

About books, I probably do not have to pontificate, since everyone knows about *www.amazon.com* . I know people who never go to bookstores anymore. I'm not one of them, since I tend to look for things that even Amazon doesn't carry. But antiquarian and genealogical booksellers are online, too. I've found various gems through the Net that would have taken many a musty book sale to locate otherwise.

Another way to use the Internet—to avoid the telephone and to avoid even telephone books—is to look up telephone numbers and postal addresses.

Speaking of obscure books, Harvard recently published its fiftieth volume of oriental translations, which happened to be a complete metrical version of the Rig Veda. Naturally I bought one (I don't read Sanskrit, but never mind that). It came with a floppy that was supposed to contain the text. The floppy was damaged and didn't read completely. After half an hour of fiddling with it, I used Altavista to search for "Rig Veda" +Harvard and located *www.vedavid.org* . Five minutes later I had the complete text on my local disk. Some people say the Internet is an advertising medium for paper books. In this case, the paper book was an advertisement for the Internet.

High schools and elementary schools are using the Net more these days. I think I've seen report cards delivered by electronic mail, but I can't find an example right now.

The average church now has a Web page, as in *www.l-p-c.org* or is at least listed in one, as in *www.unidial.com/~flint_river/bchurch.htm* . Synagogues, mosques, Hindu temples, and others, too, of course.

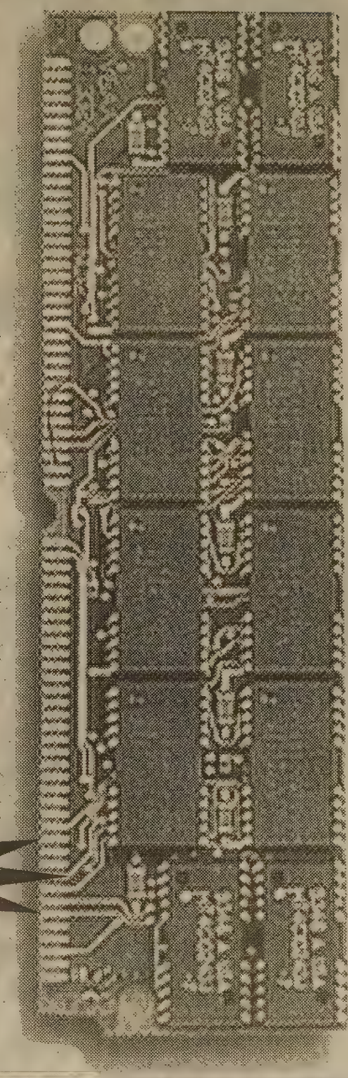
Many of the people I meet for business these days I meet via an electronic mail message, saying, "X, meet John, John, meet X; I know you both have Web pages to introduce each other." No recomposition of self-descriptions nor mailing of paper resumes necessary.

We ordered some equipment recently for someone who was visiting from Europe. The actual research and ordering was almost all done through the Web. The order confirmations came by electronic mail. The order delivery took four days and half a dozen telephone calls to make happen. "The FedEx plane didn't fly." Right. We told the vendor that if they said, "The dog ate it," we wouldn't believe that, either. The equipment finally arrived. The contrast between the ease of the Web-based parts and the parts involving actually shuffling atoms across the continent was impressive. If we'd had to use paper catalogs and the telephone to do the research and ordering, we never would have managed to make it happen in the available time.

You can use the Net to avoid general fuss and bother in shopping and general business transactions. Generally, if somebody doesn't have a Web page and a mail address, shop further. The Internet is no longer an option; it is a necessity for doing business. ◆

Copyright © 1998 by John S. Quarterman. All rights reserved.

DON'T TRASH IT, CASH IT!



WE WILL BUY YOUR OLD MEMORY

EXCHANGE YOUR 72-PIN SIMMS FOR 168-PIN DIMMS, OR GIVE US YOUR 80NS & 70NS MEMORY IN TRADE FOR FASTER 60NS EDOS/10NS SDRAM TO KEEP UP WITH YOUR FASTER SYSTEMS

ALL TYPES OF DIMMS ARE CURRENTLY AVAILABLE:

BUFFERED • UNBUFFERED • 3.3 OR 5.0V

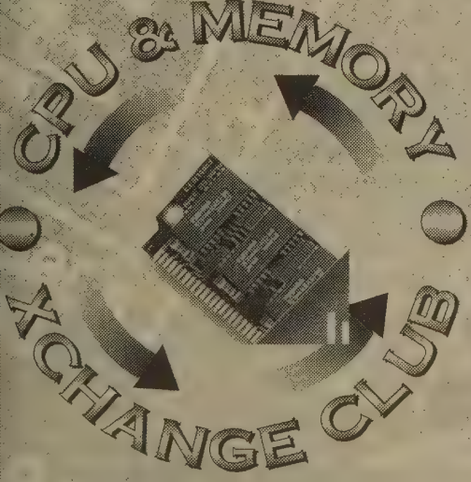
SDRAM-EDO-ECC-PC-100-MAC G3

WE HAVE IT!

SELL YOUR OLD MEMORY TO US.

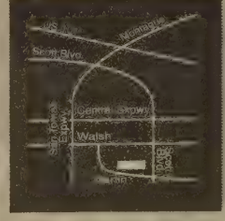
- Does your new system board require 72-pin SIMMs?
- Want to upgrade from 8MB to 16MB or higher, but all your memory expansion slots are full?
- We carry all types of Memory for almost any application at FANTASTIC prices!
- All Memory purchase from us are backed by a Lifetime Warranty
- Wish to trade-in your 30-pin SIMMs for 72-pin SIMMs?

TRADE YOUR OLD MEMORY WITH US.



MONTHLY SPECIALS

RAM		DIMMS	
ITEM	PRICE	ITEM	PRICE
1X3 NC	$4.00	32MB SDRAM	$49
1x8	$3.00		
1x9-100	$2.00	64MB SDRAM	$115
1x9-70	$4.00		
16x9	$49.00	128MB SDRAM	$219
256K x36	$2.00		
512K x40	$4.00	32MB PC-100	$78
512K x36	$3.00		
1x9-80	$3.00	64MB PC-100	$149
2x8	$4.00		
2x32	$13.00	128MB PC-100	$364
4x32	$28.00		
1x32	$7.00		



Santa Clara
CPU & Memory Xchange Club
2450 Scott Blvd., Ste. 307, Santa Clara, CA 95050
Tel: (408)654-9090 • Fax: (408)654-9463
Office Hours: M-F 9-6 • Sat 11-4

San Francisco
CPU & Memory Xchange Club
225 Bush St. #164, San Francisco
Tel: (415)288-9460 • Fax: (415)288-9469
Office Hours: M-F 9-6 • Sat 11-3

Yes, We Accept Corporate Purchase Orders
(subject to credit approval)

ATM DISCOVER VISA MasterCard AMERICAN EXPRESS

Only Visa, MC, Check & Cash are accepted at S.F. Location

Pentium is a trademark of Intel Corporation. Prices and specifications are subject to change without notice. All product names or company names are trademarks or registered trademarks of their respective companies.
© Copyright 1995 CPU & Memory Xchange Club

The Decade Of Convergence

Titans Poised To Conquer Emerging Market

By Bill Gram-Reefer

PC-TV Convergence is a market ready to be swept off its feet. One of the reasons is that while PC penetration into the home is about 40%, TV has a whopping 98% penetration.

Convergence is many things to many people. If you throw it all together, step back and look at it, Convergence is the integration of video, audio, computers, telephony, and even toss in networking and the Internet.

Steve Jobs is into Convergence. So is Bill Gates. Hollywood loves Convergence. Disney loves Convergence, too. So do big-time TV media moguls like Rupert Murdoch and Ted Turner. And each camp wants to make sure they get a huge chunk of the coming bonanza all of this Convergence will bring.

So depending on who you talk to, Convergence means: Watching TV or listening to the ball game on your computer, surfing the Web on your TV, placing long distance calls from your computer, or using the Internet to route long distance dial-up calls to some local loop. For some, Convergence means having your computer jacked to control your home theater, or automate home and office facilities including home security. For others still, Convergence means rigging your bass boat or automobile with computer-based satellite global positioning gizmos. Or using your PCS telephone to surf the Web.

There's PC-TV Convergence, PC-Telephony Convergence, and PC-Appliance Convergence. While wider adoption of PC-Appliance Convergence (home automation, home theater, home security) seems further out on the horizon, the PC-TV and PC-Telephony Convergence markets will explode over the next three years.

PC-Telephony Convergence is hampered by Bill Kennard and the other idiots on the FCC, and by a half-century-old, two-tiered per-minute pricing model that AT&T and the Bells hold as sacred cows, so that sector will lurch ahead only in fits and starts. But it's harder for gubbermint to get in the way of PC-TV Convergence. That won't happen until more and more content and programming including digital audio and HDTV starts getting pumped into your PC-TV over the Internet. Then the FCC will push its way in to make sure the Telcos get their cut. But it will be a rocket ride until reality kicks in.

Scrambing Of The Titans

PC-TV Convergence is a market ready to be swept off its feet. One of the reasons is that while PC penetration into the home is about 40%, TV has a whopping 98% penetration. So to bolster new sales and drive a new paradigm in computing, companies like Microsoft and Intel will be teaming up with suitable partners for the last best dance of the 20th Century that will remake how you watch TV and how you compute.

Microsoft, for instance, has already swallowed WebTV for $425 million in cash and stock, and plans to make PCs into TV receivers using Windows NT 5.0, CE, or some other derivative operating system. Analysts claim there will be 40 million TV-ready PCs sold before 2000. This is the tip of the iceberg as Microsoft, Compaq, and Intel plot to develop new standards for digital television.

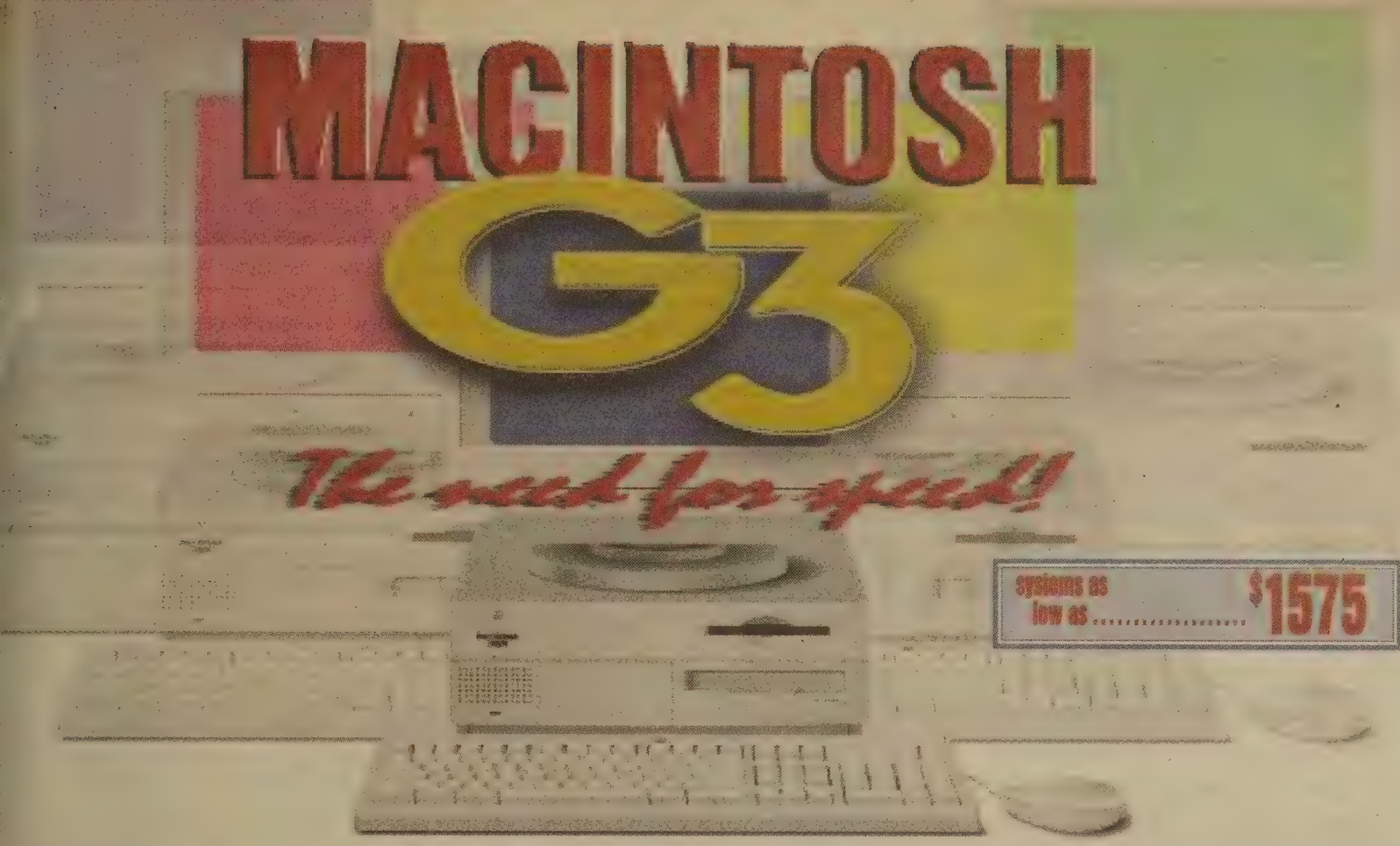
More recently (April 7) Microsoft Corp. and Sony Corp. announced their intent to collaborate on convergence of the personal computer and consumer AV electronics. To make sure PC and AV platforms are joined at the hip at birth, Sony will license the Microsoft Windows CE for use in certain future products. Similarly, Microsoft will license Sony's Home Networking Module, a sort of middleware that supports home-networking standards currently being proposed.

To ensure that PCs and AV equipment no longer evolve on separate paths, Microsoft and Sony will support and endorse various digital television (DTV) formats. Production, transmission and reception will be addressed by both companies to enable seamless transmission and display of digital content. Because video formats can differ at each step, Microsoft and Sony plan to support the formats that will enable the fastest migration to digital television.

Both Microsoft and Sony will support the "1080 interlace standard" as the preferred format for HDTV production and archiving because of its high resolution affordability and general availability. In addition, Sony will develop both 480

MACINTOSH G3

The need for speed!



systems as low as $1575

MacByte is a full-service Apple Authorized Reseller that will help you from choosing a system which is best suited for your needs, up to, setting up a complete network for you or your company. We are experts in converting data from PC to Mac and Mac to PC. We even have leases and will take your equipment as Trade-ins on new gear.

DESKTOPs

G3	DT 233 32/4Gig/CD	$1675.00
G3	MT 266 32/6Gig/CD/Zip	$2450.00
8600	200 32/2Gig/CD/Zip	$1695.00
6500	225 32/3Gig/CD/Zip	$1095.00
5400	200 32/2Gig/CD/Eth	$1395.00

MONITORSs

Apple 15AV	$375.00
Apple 720	$649.00
Sony 200GS 17"	$659.00
ViewSonic E771 17"	$395.00
ViewSonic Optiquest 20"	$999.00

PC LAPTOPs

Dell	Inspiron 233MHz 32/3.2Gig/15" Monitor	$2350
IBM	Thinkpad 770 233MHz 32/5.1Gig	$4995
Toshiba	Tecro 750 CDT 233MHz 32/4.7Gig	$4999.00

POWERBOOKs

G3	250 64/5Gig/CD/56K	$4995.00
3400C	200 32/2Gig/CD/33.6	$2795.00
1400C	166 16/2Gig/CD	$1975.00
1400C	133 16/1Gig/CD	$1675.00
5300C	16/750	$975.00

PRINTERSs

Hewlett Packard 4000N	$1495.00
Apple 8500	$1995.00
Image Writer II	$399.00
Epson Stylus 600	$269

PC DESKTOPs

Compaq	4000 233MHz 32/2Gig/CD/15" Monitor	$1395.00
Premise	100 233 PII 64/3.2/NIC/95	$1150.00
IBM	300GL 233 32/2.5/95	$1050.00

Order On-Line

It's fast and easy.
See our web site at
www.macbyte.net

MacByte

SALES • LEASING • CONSULTING • TRADE-INS

www.macbyte.net

CALL TODAY!
800.432.2983

and 1080 progressive production equipment with the 1080 equipment taking the lead as the long term target. Sony will also support all of the ATSC transmission formats, including progressive scan formats.

That's what's happening in the boardroom. Let's take a look at the other end of the spectrum; the gadgets and gizmos that are beginning to appear in the Convergence market.

Meanwhile, At The Mall...

No need to wait for Microsoft, Intel, and Sony to map out the future—you can already buy a PCTV today. Compaq and RCA (*www.compaq.com*) jointly developed a PC-TV, retailing for $3,999 called the PC Theatre. It combines a 36" RCA television and a Compaq 200MHz PC. The RCA display uses a non-interlaced monitor/TV screen. The computer comes with 40MB of memory and a 3.8GB hard drive, a 16X CD-ROM and a 33.6kbps modem. You also get two cable-ready 181-channel tuners, and picture-in-picture capability for viewing two channels simultaneously.

Coologic (*www.coollogic.com*) makes a Web TV that lets you surf both TV channels and the Web. You can add a CD-ROM or DVD, plus even more memory. Gateway (*www.gateway.com*) offers a 31" screen PC-TV for $4,599 that is called the 2000 Destination. This baby sports a Pentium II 300MHz processor, 64MB of memory, an 8GB hard drive, plus a 56kbps modem, complete with a 31" VGA monitor/TV. Karmon Kardon supplied the surround sound.

Tsoft Internet

Dial-up • Shell • Web Hosting • Co-Location • Dedicated

PPP Account . . . . . $19.95/mo.
- Unmetered Modem access up to K56Flex or v.90 (28.8/36.6Kbps too); for single person.
- 5MB space for your own Web Site

PPP/Shell Account . $25.95/mo.
- PPP w/ a BSD Shell Account
- 20MB space for homedir and Web included
- Optional custom domain name $7/mo.

T-1 1.5Mbps from $495/mo.
The Ultimate Internet Access for small to medium sized businesses and net junkies.

Dedicated Modem . . . . $85/mo.
- 24x7 PPP access, static IP
- Multiple IPs add $20/mo.

UnMetered 128K ISDN $39.95/mo.

Charter ISDN Account $39.95/mo. (limited qty)
- Unmetered - No hourly Internet Fees!
- 1B/2B (56-128 K) with modem backup
- Optional BSD Shell account $6/mo.

Standard ISDN Account . . . . . $19.95/mo.
- 1B/2B (56-128K) with modem backup; 40 B-hours included, $0.50/hr. additional
- Optional BSD Shell account $6/mo.

xDSL, Dedicated 24x7 ISDN Multilink Analog Modem (part-time and dedicated), Frame Relay and UUCP connections available. Server Co-location from $149/mo.

Access numbers local to the entire Bay Area! Including Santa Cruz, Boulder Creek, north to Vallejo, Fairfield, Santa Rosa

No Set-up Fee on Dial-up Services

Livingston Enterprises, Inc.

Technology Provided by microelectronics group

K56 FLEX

Lucent Technologies

Give us a call at (510) 843-8763 or visit http://www.tsoft.com/services

If you just sprung for a big TV, you'll have no trouble finding set-top boxes that can add Web to your TV.

Princeton Graphics (*www.princetongraphics.com*), sells a PC-TV named Arcadia for $1,399. It's compatible with both Wintel and Macintosh PCs, with a monitor resolution of 800 x 600.

Zenith (*www.zenith.com*) has a new line of big-screen TVs called NetVision that will come with browser and email software, plus an infrared remote control with a built-in trackball, and a 28.8kbps modem. An Ethernet port will let you use a cable modem if it ever rolls into your neighborhood. A 27" model will retail for $999. An even more expensive 35" model will be available only from specialty dealers for around $3,500. Zenith plans to offer add-ons such as wireless keyboards.

If you just sprung for a big TV, you'll have no trouble finding set-top boxes that can add Web to your TV. A handful of these boxes have been announced from Acorn Computer (*www.acorn.co.uk*), Akai (*www.akai.com*), and Bandai (*www.bandai.co.jp*) using Apple's Pippin technology.

Philips Magnavox's (*www.philipsmagnavox.com*) WebTV Plus will sell for about $300. This next generation of WebTV has a 56kbps modem

and a 1.1GB drive. A similar device is being marketed by Mitsubishi for $379. RCA's (*www.rca-electronics*) NC1010 Network Computer "Information Appliance" sells for $299 and includes a 33.6 modem and printer port.

Then there are the toys that go along with this stuff. The necessary accouterments like RF Link Technology's (*www.rflinktech.com*) Wireless PC@TV, which debuted at the Consumer Electronics Show in Las Vegas just this past January. It's billed as a PC-TV convergence device that uses 2.4GHz radio signals to transmit audio and video from your PC to your television at a range of up to 100 feet, through bodies, walls or floors.

Analysts claim there will be 40 million TV-ready PCs sold before 2000. This is the tip of the iceberg as Microsoft, Compaq, and Intel plot to develop new standards for digital television.

PC@TV includes two transmitter/receiver units, one for your TV, and the other for your PC. A wireless keyboard allows you to control your PC through the transmitter atop your TV, and receive the signal from your PC on your television.

The PC transmitter converts VGA to National Television Systems Commission (NTSC) standard so that the images on your monitor can be viewed on your TV screen. Software is included to enhance images and fonts for low-res TV. With PC@TV you can play your PC video games, browse the Web, or read and send email from your living room.

Once you get all of this stuff hooked up, surf on over to Smart TV Magazine's Web site (*www.smarttvmag.com*). They have good links to broadcast, cable, and satellite listings so you always know what's on. Sections for CD-ROM and DVD let you know about the latest titles, and provide lots of links to TV-friendly sites. There are also sections for home automation, and for strategies and standards that explain the technology and help you set up the interactive system of your choice.

If you want to skip the PC-to-TV part and want to try a simple TV-on-PC approach, check out RealAudio 5.0 (*www.real.com*). For around $60 you can download the program and preset up to 40 channels of Classical music, Rock, News, Sports and Live-TV, or video. You can watch Fox News all day long on the computer screen while you work. Sometimes net congestion slows down the live feed to only a choppy 20kbps stream and makes it difficult to log onto some of the presets. But, hey, this is your easiest entry into Convergence. ◆

Copyright © 1998 by Bill Gram-Reefer. All rights reserved.

We Will Meet or Beat Any Advertised Price!

Your Network Specialists - Callan Corp.

AUTHORIZED RESELLER:

COMPAQ · IBM · Novell Gold Authorized Reseller · PANDUIT · Panasonic Office Automation · intel · hp

PLEASE TURN TO OUR FULL-PAGE AD ON PAGE 133

For All Of Your: Network, Internet, Software, Data/Phone Cabling, Hubs, Cards, Routers, and Ethernet Needs...

Don't Delay
Call Today

CALLAN CORPORATION
1-888-483-4-LAN or 408-986-9786

$14 a month

Tired of Getting A Busy Signal Then Get Ready For

CKNS INTERNET

Includes The Following:

- Unlimited Internet Access
- 10MB Web Space
- 56K Flex & v.90 Dial Up Access
- 10 Day Money Back Guarantee

PLUS MORE...

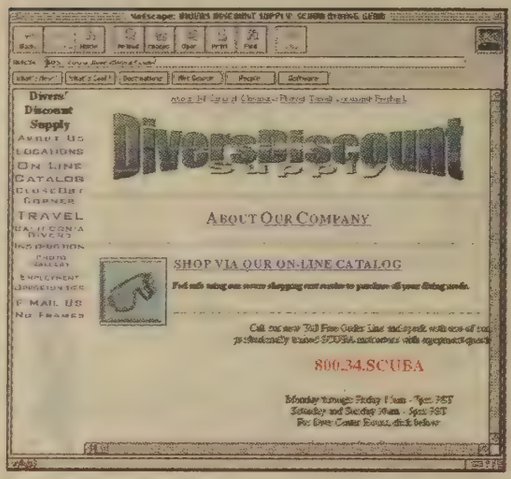
Premier Accounts Also Available Includes:

- ISDN - FRAME - T-1
- Web Page Set-Up & Design
- Full Turn Key Commerce
- Secure Hosting & Billing

408-247-9720

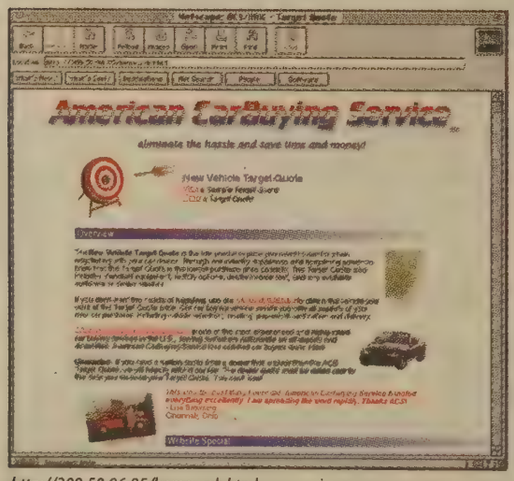
www.ckns.net ▪ E-mail: info@ckns.net

Web Page Listings



http://www.diverdiscount.com

http://www.people-link.com



http://209.50.96.85/home_rrk.html

Computer Products & Services

Amiga Technology Australia *http://www.AmigaTech.com.au* Distribution of Commodore-Amiga computers and spare parts. [Exp. #179.]

Astrology Software *http://ourworld.compuserve.com/homepages/kenneth_hirst* For shareware, fonts, and metaphysical information. Astro-World provides print and screen interpretations for Radix (Natal), Synastry, and Transit Horoscopes. [Exp. #179.]

BugNet Alerts *http://www.bugnet.com* BugNet delivers the definitive word on the bugs in Microsoft's new FrontPage 98. [Exp. #179.]

CCH, Inc. *http://www.toolkit.cch.com* CCH Business Owner's Toolkit is a portfolio of information and software tools designed to help small business owners and home office entrepreneurs start, run, and grow their businesses. [Exp. #180.]

Computer System Solutions *http://www.comput.com* IBM-compatible systems. High quality, competitive prices. Warranty and support included. Since 1989. [Exp. #181.]

Digital Auction *http://www.digital-auction.com* A new online auction for PC systems, hardware, and computer upgrades. [Exp. #181.]

Follgard Group Inc. *http://www.follgard.com/* A hi-tech, multimedia, communications, and marketing company, specializing in CD-ROM, Web site, e-commerce, telephony, and software development. [Exp. #181.]

JEM Computers *http://www.jemcomputers.com* Since 1992, JEM has been known for selling top-notch refurbished and manufacturer's excess inventory for 25% to 45% below retail. [Exp. #180.]

Match Software Fonts *http://www.matchfonts.com* Online font catalog for Windows, Mac, and OS/2. [Exp. #181.]

micro2000 *http://www.micro2000.com* [Exp. #180.]

PCSDirect Software Superstore *http://pcsinternet.com/office/eric* Over 40,000 software titles of the latest and best software the industry has to offer. [Exp. #180.]

Polaris PackRat Professional *http://www.polarissoftware.com* A powerful, customizable desktop information management system. [Exp. #181.]

Sea Breeze Computers *http://www.seabreezecomputers.com* Computers sales and service for Watsonville and Santa Cruz area. [Exp. #179.]

VTechSoft, Inc. *http://www.vtechsoft.com* [Exp. #180.]

Web/Internet Services

A+ACY-D Internet Consulting *http://www.adinternetc.com* Localized Internet presence, Web site development, e-commerce solution, online marketing. [Exp. #180.]

Absolute Magic Computers/Internet *http://www.absolutemagic.com* Affordable Web site design and maintenance, computer and network consulting. Ten years in Orange County. [Exp. #181.]

AceWeb Network *http://www.aceweb.net* [Exp. #180.]

Armasoft Web Design *http://www.armasoft.com* Web design and hosting. [Exp. #179.]

AXIS Partners *http://www.axispartners.com* Specializing in Web design, site architecture and navigation, content targeting, and intranet deployment. [Exp. #179.]

Business Mall *http://www.webbusiness.com* Free Web page with hosting, $13.50/month. Internet advertising services. [Exp. #179.]

CatchTheWeb *http://www.catchtheweb.com* allows users to capture any Web page or series of Web pages, annotate and organize them, and arrange them into a presentation viewable in any JavaScript-capable browser. [Exp. #181.]

Cuenet *http://www.cuenet.com* Listservs, email, WWW, domain hosting, site development, and complete outsourcing. [Exp. #181.]

DG Publishing Online *http://www.dgpublishing.com* Free Web site promotion software. Automatically submits your URL to over 400 search engines. [Exp. #179.]

Free Money Making Web Site *http://www.Waimea-Bay.com* Earn up to $1,000 per week. Be on the Web today. [Exp. #180.]

Gizmo Beach Web Design *http://www.gizmobeach.com/* A Web design company that specializes in dhtml, databases, and custom programming. [Exp. #179.]

HieroWeb Interactive *http://www.hiero.com/* HieroWeb Interactive develops, creates, and maintains sites on the Internet. [Exp. #179.]

IT Network *http://www.itnetwork.co.uk/* Internet TV and multimedia data storage information service. [Exp. #181.]

National Direct Internet Yellow Pages *http://www.ndiyp.com* Search for local and national businesses. Easy to use and in familiar style. Get a free business listing. [Exp. #179.]

Nu Age Media *http://www.NuAgeMedia.Com* We do Web site development. [Exp. #180.]

Octadrive Productions *http://www.octadrive.com* [Exp. #180.]

Outta Site Web Design *http://www.drjack.com/outta_site* Creative Web page design and consultation. Large graphics and animation library. Great prices. [Exp. #179.]

SinaSearch *http://www.sinanet.com* The world's first complete Chinese/English search engine. [Exp. #181.]

Siris.com *http://www.siris.com/* Multimedia, communication, and Web design. [Exp. #181.]

TagGen *http://www.hisoftware.com/taggen.htm* TagGen makes your Web site presentable to search engine Web crawlers by generating appropriate meta tags. [Exp. #180.]

The Editors Advertising Agency *http://www.theeditors.com/* 20-year-old full service ad agency specializing in Web page design, advertising, marketing, graphic design, and print collateral. [Exp. #181.]

The-Best-Of.com *http://www.the-best-of.com* Users can vote for your business and win prizes. Business Web pages for $15/month. [Exp. #181.]

Web Edge *http://www.webedge1.com* Web page builders and hosting. [Exp. #179.]

Web Precision *http://www.webprecision.com* Get a free Internet marketing consultation and discover how to make the Internet work for you. [Exp. #180.]

XLM.com *http://www.xlm.com* A new Web site that serves as a key resource and nerve center for XML developers and users. [Exp. #180.]

continued on page 144

WHY BUY FROM ANYONE ELSE...WHEN YOU CAN BUY FROM THE BEST—
UNIVERSAL COMPUTER PRODUCTS

FREE mouse pad with mouse purchase

1-YEAR PARTS/ 1-YEAR LABOR WARRANTY ON ALL SYSTEMS

Pentium® II Processor and PCI System w/512K Cache

- 32MB SDRAM
- Teac 1.44MB 3.5" Floppy Drive
- 4.3GB IDE Hard Drive
- 2 Serial, 1 Parallel
- 17" SVGA Monitor .28dp NI
- PCI VGA Card w/2MB
- ATX Medium Tower Case
- 104 Enhanced Keyboard
- Windows 95
- Microsoft PS2 Mouse w/Pad
- 24X CD-ROM Drive
- 16-Bit Sound & Speakers
- Supra 56K Int. Fax Modem

intel inside

233MMX $1429
266MMX $1479
300MMX $1629
333MMX $1779
350MMX $1919
400MMX $2119

Pentium® Processor and PCI System w/512K Cache

- 32MB EDO RAM
- Teac 1.44MB 3.5" Floppy Drive
- 2.5GB IDE Hard Drive
- 2 Serial, 1 Parallel
- 14" SVGA Monitor .28dp NI
- PCI VGA Card w/1MB
- Medium Tower Case
- 104 Enhanced Keyboard
- Windows 95
- Serial Mouse w/Pad
- 24X CD-ROM Drive
- 16-Bit Sound Card
- Stereo Speakers
- Supra 56K Int. Fax Modem

intel inside

133MHz $965
166MMX $1000
200MMX $1015
233MMX $1060

REPAIR & UPGRADE SERVICES

ON IBM & IBM COMPATIBLES

- FULL SERVICE
- NO APPOINTMENT NECESSARY
- SAME DAY TURNAROUND
- COMPETITIVE RATES
- EXPERIENCED TECHNICIAN FOR OVER 10 YEARS
- COURTEOUS SERVICE

ADD-ON BOARDS

Parallel Port $20
NCL 538 Controller $50
NCL 539 Controller $50
Matrox Millennium II w/4MB $195
Matrox Mystique 220 w/4MB $159
Trident PCI VGA Card w/1MB $35
Diamond Stealth 3D PCI VGA Card w/2MB $75
Diamond Stealth PCI VGA w/2MB VRAM $99
Adaptec 2940U PCI SCSI Controller $175
Adaptec 3940U PCI SCSI Controller ..... $Call
SMC 8432T PCI Network Card $85
SMC 8432BT Combo PCI Network Card $99
SMC 10/100 9332BDT PCI Network Card $99
Intel Pro/100 PILA8465B PCI Network Card $79
3Com 3C905TX PCI Network Card $79
3Com 3C900 Combo PCI Network Card $99
3Com 590CB ISA Network Card $60
NE2000 ISA Network Card $35
NE2000 PCI Network Card $39
Toner KX-P450 ..... $39.95
Toner KX-P453 ..... $38.95
Toner KX-P451 ..... $39.95

CASES AND POWER SUPPLY

Desktop Case w/250W Power Supply $65
Mini-Tower Case w/250W Power Supply $65
Med-Tower Case w/250W Power Supply $75
Full-Tower Case w/250W Power Supply $110
ATX Case Med-Tower Case w/230W Power Supply $95
ATX Case Full-Tower Case w/230W Power Supply $119
250W UL Power Supply $45
300W UL Power Supply $69
230W Tower Power Supply $69

MODEMS

Sportster 33.6 Int. Fax Modem $110
Sportster 33.6 Ext. Fax Modem $135
Sportster 56K Int. Fax Modem $159
Sportster 56K Ext. Fax Modem $205
Diamond Supra 33.6 Int. Fax/Modem $75
Diamond Supra 56K Int. Fax/Modem $99
Diamond Supra 56K Ext. Fax/Modem $149

CD-ROMS

32X CD-ROM Drive $95
16X CD-ROM Drive $75
24X CD-ROM Drive $75
Creative Labs 16-Bit Sound Card $55
Creative Labs AW64 Value $99
Creative Labs AW 64 Gold $189
ESS 16-Bit PnP Sound Card $39
Stereo Speakers $20
Midi Kit $49

KEYBOARDS

Chicony KB5981 104 Click Keyboard $33
Chicony Ergonomic 104 Keyboard $49
Keytronic PS2 104 Keyboard $33
Focus 2001 104 Click Keyboard $35
Touch Pad 104 Keyboard $69
Microsoft Natural Keyboard $69

MEMORY CHIPS & COOLING FAN

30-Pin SIMM
4MBx9-7 ..... $CALL
1MBx9-7/8 ..... $CALL
1MBx3-7/8 ..... $CALL

72-Pin SIMM
Non EDO 1x32 / 2x32 / 4x32 / 8x32 ..... $CALL
EDO 1x32 / 2x32 / 4x32 / 8x32 ..... $CALL
SDRAM (168-Pin DIMM)
4x64 / 8x64 / 16x64 ..... $CALL

CPU Cooling Fan
486 Ball Bearing Cooling Fan $6
586 Ball Bearing Cooling Fan $8

MONITORS

NEC 15/17" SVGA Monitor ..... $Call
14" SVGA Monitor 1024x768 .28dp NI $175
15" SVGA Monitor 1280x1024 .28dp NI $225
17" SVGA Monitor 1280x1024 .28dp NI ..... $Call

MOTHERBOARDS

Pentium® II 233 MMX / 266 MMX ..... $Call
133MHz Pentium® PCI MB w/512K Cache ..... $Call
166MMX Pentium® PCI MB w/512K Cache ..... $Call
200MMX Pentium® PCI MB w/512K Cache ..... $Call
233MMX Pentium® PCI MB w/512K Cache ..... $Call

HARD DRIVES

FUJITSU
MPB3021 2.1GB UDMA $155
MPB3026 2.6GB UDMA $185
MPB3032 3.2GB UDMA $189
MPB3035 3.5GB UDMA $199
MPB3021 4.3GB UDMA $209
MPB3052 5.2GB UDMA $219
MPB3064 6.4GB UDMA $249

WESTERN DIGITAL
AC12100 2.1GB UDMA $179
AC34300 4.3GB UDMA $215
AC36400 6.4GB UDMA $265

MAXTOR
MR84320 4.3GB UDMA $209
MR85250 5.2GB UDMA $235
MR86400 6.4GB UDMA $279
MR87000 7.0GB UDMA $309
MR88400 8.4GB UDMA $325

TAPE BACKUPS

HP Colorado T3000 3.2GB Int. $175
Seagate STT23200F-R 3.2GB Int. $159
Seagate STT63200P-R 3.2GB Ext. $195
Seagate TST8000R-ABET DDS 8GB Int. $309
Seagate TST8000R-SBET DDS 8GB Ext. $359

MICE

Trackball $89
Logitech Serial Mouseman $49.95
Microsoft Bus Mouse $89
Microsoft Serial Mouse $69
DEXXA Mouse $18
Mouse Systems A3 Mouse for Mac $50
Mouse Systems A3 Trackball for Mac $50

PRINTER RIBBONS & DATA CARTRIDGES ARE AVAILABLE
COAX & TWISTED CABLES ARE AVAILABLE

UNIVERSAL COMPUTER PRODUCTS

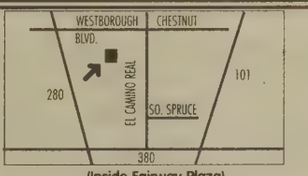
951 El Camino Real, South San Francisco, CA 94080

(650) 583-9736 Fax (650) 583-3457

Mon-Fri: 9am-6pm Sat: 10am-5pm

Prices subject to change w/o notice • Not responsible for misprints
Pentium is a registered trademark of Intel Corporation.

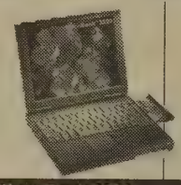
VISA MasterCard DISCOVER

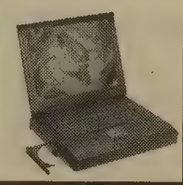
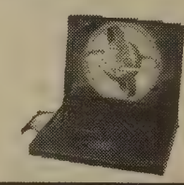


(Inside Fairway Plaza)

LINDEN MICRO TECH
— Your Notebook Solution
Visit www.linden.com for more information

Call for Pentium II Notebook



		ChemBook 3300	6280	7200	8260	9780
Processor	Intel Pentium with MMX Technology	Yes	Yes	Yes	Yes	Yes
BIOS	Plug and Play/Flash ROM	Yes/Systemsoft	Yes/Systemsoft	Yes/AMI	Yes/Systemsoft	Yes/Phoenix
Memory	EDO/SDRAM(Short DIMM)	Yse / No	Yes / No	Yes / No	Yes / Yes	Yes / Yes
	Expandable to/On Board	96MB / 32MB	72MB / No	128MB / No	128MB / No	128MB / No
	Cache	256KB	512KB	512KB	512KB	512KB
Disk Storage	HDD 2.5" / Support Ultra DMA	Removable / Yes	Removable / No	Removable / No	Removable / NO	Removable / No
	Floppy Drive 3.5"	Built-In	Removable	Removable	Removable	Removable
	Exchangeable with		2nd Battery Or MO Drive	2nd Battery	2nd GDD, LS-120FD, or Iomega Zip Drive	2nd HDD or Iomega Zip Drive
CD ROM	Speed	20X or Higher	20X or Higher	20X or Higher	20X or Higher	20X or Higher
Display	64-bit PCI Graphics	Trident Cyber 9385	Trident Cyber 9385	C&T 65554 PCI bus	C&T 65555 PCI bus	C&T 65555 PCI bus
	Video RAM	2MB EDO	2MB EDO	4MB EDO	4MB EDO	4 MB EDO
	LCD	12.1 TFT SVGA	12.2 DS/TFT SVGA	13.3 / 14.1 TFT XGA	15.1 TFT XGA	12.1 SVGA/14.1 TFT XGA
	Resolution	800 x 600, 16.8M Colors	800 x 600, 16.8 Colors	1024 x 768, 16M Colors	1024 x 768, 16.8M Colors	1024 x 768, 16.8M Colors
	External CRT up to	1280 x 1024, 256 Colors	1280x1024,256 Colors	1280 x 1024, 16M Colors	1024 x 768, 16.8M Colors	1280 x 1024, 16.8M Colors
Audio	3D Surround Sound	Yes	Yes	Yes	Yes	Yes
	Built-In Microphone	Yes	Yes	Yes	Yes	Yes
	Built-In Speaker	Yes	Yes	Yes	Yes	Yes
	Wave			Yes	Yes	Yes
PCMCIA	Number of Type II/III Slot	2/1	3/1	2/1	2/1	1/1
	Zoom Video & Card Bus Support	Yes		Yes	Yes	Yes
Keyboard		Windows 95 keyboard	A4 size Win 95 Key	A4 size Win 95 Key	102 Keys Win 95 KB with Numeric Keypad	88/89/90Keys 19 mm Pitch
Pointing Device		Built-In Glide Pad (PS/2)	Trackpad Pointing Device	Trackpad Pointing Device	Trackpad Pointing Device	Trackpad Pointing Device
I/O Interface	Infrared	Fast Infrared	Fast Infrared	Fast Infrared	Fast Infrared	Fast Infrared
	USB Port	Yes		Yes (2 Ports)	Yes (2 Ports)	Yes (2 Ports)
	Serial Port	Yes	Yes	Yes	Yes	Yes
	Parallel Port with ECP/EPP Support	Yes	Yes	Yes	Yes	Yes
	External/Mouse Port	Yes	Yes	Yes	Yes	Yes
	External CRT Port	Yes	Yes	Yes	Yes	Yes
	Game / MIDI Port		Yes	Yes	Yes	Yes
	Audio Jack for Line-In	Yes	Yes	Yes	Yes	Yes
	Audio Jack for Line-Out	Yes	Yes	Yes	Yes	Yes
	Audio Jack for Microphone-In	Yes	Yes	Yes	Yes	Yes
	S-Video Jack for TV Output		Yes	Yes	Yes	Yes
	RCA Jack for Video Input				Yes	Yes
	Connector for Port Replicator		Yes	Yes	Yes	Yes
Power System	NiMH Battery / AC Adapter	Yes/Yes	Yes/Yes	Yes/Yes	Yes / Yes	Yes / Yes
Power Management	Stand By Mode	Yes	Yes	Yes	Yes	Yes
	Suspend to HDD/DRAM	Yes	Yes	Yes	Yes	Yes
	Support APM V1.2 and ACPI V1.0	Yes			Yes	Yes
Dimensions	Physical	11.7' x 9.4' x 1.8'	11.8"x8.9"x2.0"	12.7" x 10.3" x 2.3"	14" x 11" x 2.2"	12.4" x 10.2" x 2.2"
	Weight	7lbs.	7.95Lbs.	7.95Lbs.	9.9Lbs.	7.4Lbs.
Accessories	Owner's Manual	Yes	Yes	Yes	Yes	Yes
	Carrying Bag with Strap	Yes	Yes	Yes	Yes	
Starting Price		**$1,435**	**$1,385 (DS) $1,535 (TFT)**	**$1,950**	**$2,480**	**$1,730 (12.1") $2,230 (14.1")**

Monthly Special

6280 12.1" TFT, P200MMX, 32MB, 3.0GB, 56K, F/M $**1,730.00** (Regular $1,830.00)

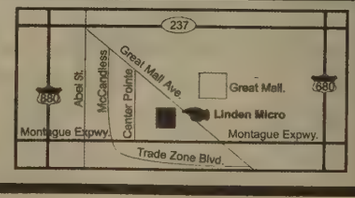
7200 14.1" TFT, P233MMX, 32MB, 3.0GB, 56K, F/M $**2,240.00** (Regular $2,270.00)

NOTEBOOK ACCESSORIES

PCMCIA 33.6 Fax Modem $70.00
PCMCIA 56 Fax Modem $90.00
PCMCIA Ethernet Card (10BaseT) $80.00
3.0GB Notebook HDD $270.00
4.0GB Notebook HDD $460.00
5.0GB Notebook HDD .....$Call

Memory (Various models/sizes).....Call
A.C. Adapter .....Call
Battery Charger.....Call
Notebook Batteries (NiMH/Li-Ion) .....Call
Car Adapter .....Call
Port Replicator .....Call
Docking Station.....Call

LINDEN MICRO TECH **(408)262-8200**
459 Montague Expwy, Milpitas, CA 95035
www.linden.com email: sales@linden.com
Fax: (408)262-8476
Hours: M-F 9am-6pm

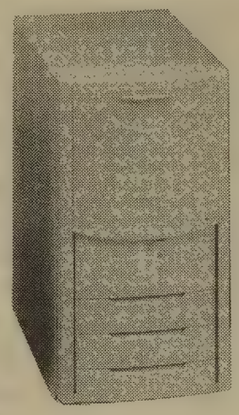


Customer's Satisfaction Is Our No.1 Priority

Corporate, Government and Education Orders Welcome!

MULTIMEDIA AT WORKSTATION

- Intel Triton TX Chip Set M/B w/512K PL Cache
- Built-in IDE Controller/IO
- Deluxe Mini Tower Case w/ 235 Watt Power Supply
- 16MB EDO RAM
- TEAC 1.44MB FDD
- 24X IDE CD-ROM
- 16 Bit Stereo Sound Card
- 1.6GB EIDE HDD
- Mitsumi 104 Key K/B
- 2-Button Serial Mouse
- PCI 64 Bit SVGA w/.2MB DRAM
- 100W Stereo Speaker
- Windows 95 Release II w/Manual & CD
- Monitor Sold Separately

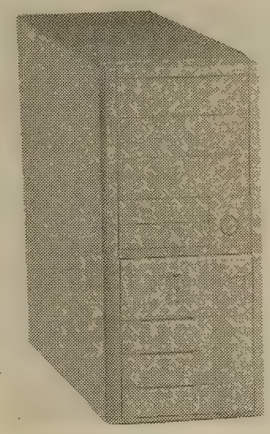


P-200MMX.....$535

P-233MMX.....$574

POWER ATX WORKSTATION

- Intel 440LX Chipset AGP M/B
- 512K PL Cache, Built-in IDE Controller/IO
- Mid Tower ATX Case w/ 235 Watt Power Supply
- 32MB SDRAM
- 32X IDE CD-ROM
- 1.44MB FDD
- 4.3 GB Ultra DMA IDE HDD
- Keytronic PS-2 K/B for Win 95
- Microsoft 2-Button Serial Mouse and Pad
- Diamond Stealth 3D 4000 w/4MB AGP Card
- Windows 95 Release II w/Manual & CD
- 15" 1280 x 1024 Monitor



P-II233MMX.....$964

P-II266MMX...$1,064

P-II300MMX...$1,170

P-II330MMX...$1,350

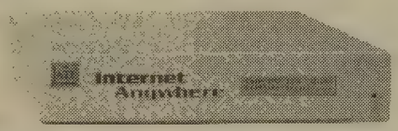
INTERNET ANYWHERE

INTERNET ROUTER E-MAIL SERVER

- Get 250 stations to access the Internet simultaneously
- Only one ISP account and one phone line is required
- No Class C IP address required
- Built-in Mail Server up to 250 private/secure E-mail addresses
- Built-in router with modem dial-up on demand
- Comes standards with internal 33.6Kb modem & 10Base T port
- Additional models to support external 33.6Kb. 56Kb or ISDN modems
- Built-in firewall protects the data on your LAN
- Standard 10Base-T LAN connection, Optional 100Base-TX. Easy Plug and Play Installation in 10 minutes

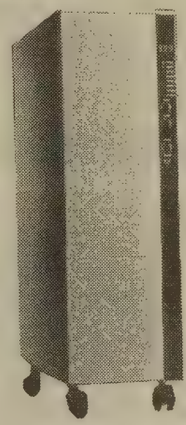
Internet Anywhere M100 33.6K Modem & 10BaseT.....$850

Internet Anywhere S100 Serial Port & 10BaseT.....$800



SUPER FILE SERVER

- Intel Dakota DK440LX AGP Dual Pentium II M/B
- Super File Server ATX Case w/ Redundancy 300 Watt Power Supply
- 64MB 10ns SDRAM
- Teac 1.44MB FDD
- Keytronic PS-2 K/B for Win95
- 4 GB Quantum Ultra Wide SCSI Hard Disk
- Microsoft Ergonomic Mouse
- Adaptec Ultra Wide SCSI Controller
- 24 X Toshiba IDE CD-ROM
- ATI Xpert@work/4MB SGRAM AGP
- Intel 10/100Base TX PCI Ethernet
- Monitor Sold Separately



P-II-233MMX...$1,970

P-II-266MMX...$2,090

P-II-300MMX...$2,200

VIDEO CARD

Trident 9680 PCI MPEG W/1MB $23
S3Virge 3D MPEG W/2MB $37.50

ATI

3D Xpression + PC2TV PCI 2MB/4MB DRAM$90/$112
3D PRO TURBO PC2TV 4MB/8MB GRAM $4125/$163
Xpert @ WORK AGP 4MB/8MB .....$188/$225

DIAMOND

Stealth 64 PCI 765 1MB/2MB PEG.....$46/54
Stealth 3D 2000 PCI 2MB/4MB EDO PEG$58/68
Stealth 3D 2000 PCI 2MB/4MB VRAM$128/148
Fire GL 1000 8MB.....$189
Viper V330 AGP 4MB.....$174

MATROX

Millennium II 4MB (Bulk) $170
Millennium II 8MB (Bulk) $278
Mystique 220 4MB SGRAM (Retail) ..$130

NUMBER 9

Imagine 128 S2E PCI 4MB $255
Imagine 128 Series II PCI 4MB $445

TAPE BACKUP DRIVE

HP / COLORADO

C1534 4mm DAT 2GB SCSI Internal $545
C1536 4mm DAT 2-4GB SCSI Internal.....$593
C1599 4mm DAT 8GB SCSI Internal $775
T3000 3.2GB $180
T4000 4.0GB TRAVAN Internal.....$373

IOMEGA

ZIP Drive (100MB) IDE Internal $96
ZIP Drive (100MB) SCSI Internal $150
ZIP Drive (100MB) Parallel Port $135
JAZ Drive 1GB SCSI Int/Ext .....$295/$395

FAX/MODEM

US Robotics

Sportster V.34 33.6K Internal wo/w VOICE ....$75/$95
Sportster 56K Internal wo/w VOICE (Buck) $105/$145
Sportster 56K External wo/w VOICE(Retail) $187/$217

JATON

33.6k Internal w VOICE $45
56K Internal w VOICE $65

Diamond

56K Supramax (V.90) $67

CONTROLLERS

ADAPTEC

2940 U SCSI PCI $158
2940 UW SCSI PCI $178
3940 SCSI PCI $275
3940 W SCSI PCI $455

MULTIMEDIA

SOUND CARD

Sound Blaster 16PNP $35
Sound Blaster 64 AWE Value Pak $65
ESS 1868 PNP 16 BIT Sound Card $12
YAMAHA OPL3 16 BIT Sound Card $12

CD-ROM

Panasonic 24/x IDE CD-ROM $58
Toshiba 24x IDE CD-ROM.....$64
NEC 24x SCSI CD-ROM $107
Panasonic 24x SCSI CD-ROM $89

SPEAKER

Altec Lansing ACS45 .....$70
Altec Lansing ACS52 .....$75

STORAGE SOLUTION

Parallel Port Storage Subsystem

ParaDisk 250 .....CALL
ParaDisk 350 .....CALL
Par Drive 525 .....CALL
Sound Track 525-Playing Multi-Media ....CALL
Par Station .....CALL

SCSI Storage Subsystem

7 - Drive Bay Disk Array Chassis .....CALL
8 - Drive Bay Disk Array Chassis .....CALL
10- Drive Bay Disk Array Chassis .....CALL
14- Drive Bay Server/ Disk Array ChassisCALL
16- Drive Bay Server/ Disk Array Chassis .....CALL

PCMCIA STORAGE SUBSYSTEM

CarDisk 250/ CarDisk 350 .....CALL
CarDrive 525.....CALL
CarStation .....CALL

MONITOR

SHAMROCK

SRC - 1407 14" 1024 x 768 0.28 NI, Digital $125
SRC - 1502L 15" 1280 x 1024 0.28 NI, Digital ..$175
SRC - 703LD 17" 1280 x 1024 0.28 NI, Digital ..$305
SRC - 705 17" 1600 x 1280 0.26 NI, Digital $355

VIEWSONIC

E641 14" 1024 x 768 0.28 NI.....$202
17EA 17" 1280 x 1024 0.28 NI, PnP.....$557
17PS 17" 1600 x 1280 0.25NI, PnP TCO..$655
G771 17" 1280 x 1024 0.27 NI $435
GT700 17" 1280 x 1024 0.25.....$650
P775 17" 1600 x 1280 0.25 NI.....$670
G810 21" 1600 x 1280 0.25 .....$1,359
P810 21" 1600 x 1280 0.25 .....$1,293
P815 21" 1600 x 1280 0.25 NI $1,440

HARD DRIVES

FUJITSU

M3026AT 2.6GB IDE $170
M3035AT 3.5GB IDE $205
M3043AT 4.3GB IDE $255
M2954QYF 4GB 512K Ultra-Wide-SCSI $619
M2954SYU 4GB 512K SCSI-2, 7200rpm $520
M2949QYF 9GB 512K Ultra-Wide-SCSI $850
M2949SYU 9GB 512K SCSI.....$860

SEAGATE

ST34572N 4.5GB Ultra SCSI-2 .....$562
ST34572W 4.5GB Ultra Wide SCSI-2 .....$570

MAXTOR

4.3GB Ultra-DMA IDE.....$255
6.4GB Ultra-DMA IDE.....$340
8.4GB Ultra-DMA IDE.....$355

WESTERN DIGITAL

WDC-AC34300 4.3GB IDE DMA $255
WDC-AC35100 5.1GB IDE DMA $300
WDC-AC36400 6.4GB IDE DMA $359
WDC-E/1360 4.3GB Ultra SCSI.....$545
WDC-E4360 4.3GB Ultra-Wide SCSI $545

QUANTUM

QM34320STA 4GB 28K IDE.....$270
QM36480STA 6.4GB 128K IDE 5400rpm.....$355
QM33240STS 3.2GB 128K Ultra SCSI.....$279
QM34320STS 4.3GB 128K Ultra SCSI.....$319
Altar-24550W 4.5GB 512K UW-SCSI $569
VK45W 4.5GB Wide SCSI $599
QM36480STS 6.4GB 128K Ultra-SCSI $409

LINDEN MICRO TECH
459 Montague Expwy, Milpitas, CA 95035
www.linden.com email: sales@linden.com
Tel: (408)262-8200
Fax: (408)262-8476
Hours: M-F 9am-6pm

VISA DISCOVER

Does *"The Web"* have you tied up in knots?

Do you wish you could just *"Try it Out"*?

THE DIAMOND LANE
has a deal for you!

INTERNET ACCESS
10 hours for $9.95/month

(510) 293-0633
http://www.tdl.com

THE DIAMOND LANE
FAST LANE TO THE INTERNET

Over 10 hours - $2.00/hr.

Includes FREE Set-Up Disks with Netscape Navigator™

Trademarks registered to their respective owners
© 1997 THE DIAMOND LANE ALL RIGHTS RESERVED

Does Your Company Have Technical Job Openings?

Target Qualified Professionals with MicroTimes.

Our readership sets us apart!

- **68%** *hold bachelor's degrees or higher*
- **50%** *have over 10-years computer experience*
- **48%** *are managers, engineers, or programmers*

MICROTIMES CLASSIFIEDS

For info call Larry Nusbaum
Classified Account Executive
(510) 768-1200 • E-mail: larry.nusbaum@microtimes.com

continued from page 140

ZapMap *http://www.zapmap.com/index.html* Interactive, vector-based geographic hot-spot directory of Web sites in Silicon Valley, written in Java. [Exp. #180.]

Services & Products For Sale

American Car Buying Service *http://209.50.96.85/home_rrk.html* Provides new auto pricing services over the Internet. [Exp. #181.]

Art4Media *http://www.art4media.com* ART4MEDIA is a small team of Bay Area artists and marketing entrepreneurs dedicated to producing art for effective promotional collateral. We provide creative and production services for logo design, music packaging, and interactive media. [Exp. #180.]

Autowest Dodge In Fremont *http://www.teamautowest.com* [Exp. #179.]

Beverly Hills Premiere Tour Operator *http://www.bhpremiere.com* US inbound tour operator specialized in medical conventions. [Exp. #179.]

Carded Merchandise *http://www.angelfire.com/in/OurHardware/index.html* Need computer hardware new at 90% off? We have anything and everything for you, and you are just going to have a heyday with this site. Easy to order, too! [Exp. #180.]

ComCoTec, Inc. *http://www.comcotec.com/* Pharmacy health care systems and services. [Exp. #181.]

Costello & Associates *http://www.costellonet.com/* Management consulting firm. [Exp. #181.]

Divers Discount Supply *http://www.diversdiscount.com* Online catalog for scuba gear sales. Diving information. [Exp. #179.]

Duncan's American Radio Web Site *http://www.duncanradio.com/* Radio research for inside the radio industry. [Exp. #181.]

Electronic Prospecting *http://www.electronicprospecting.com* [Exp. #179.]

Ethnic Apparel *http://www.helenzeke.net/* Irish Apparel, food, ethnic shirts, and novelties. [Exp. #181.]

Evian Natural Spring Water *http://www.evian.com* Your source for living well. [Exp. #179.]

EZ Calm *http://www.masterm.com/ez_calm.html* Health Web site: Relieve stress, overcome substance abuse, hospital tested. [Exp. #179.]

HPV Systems *http://www.hpvsystems.com/* Air duct cleaning of every type, material, size, and form in the Netherlands and Belgium. [Exp. #181.]

HTBrown Consultancy *http://www.htbrownconsultancy.com/* Consulting in Government procurement policy and contract management and business development. [Exp. #181.]

Hyatt Hotels *http://www.hyatt.com* As part of the launch for this redesigned site, Hyatt is giving away a trip around the world, which can be entered via the new site. [Exp. #180.]

Impact Parts *http://www.impactparts.com/* Honda and Acura performance accessories. [Exp. #181.]

KMB Enterprises *http://www.kmb-enterprises.com* Computer, CB, and amateur radio sales. We offer online ordering with competitive prices. [Exp. #180.]

Lampshades *http://marionharris.com* Custom lampshades replicated or designed in fabric and hides. [Exp. #179.]

Medical Bill Auditing Consulting Systems *http://www.mbacs.com/* [Exp. #181.]

Menu Design & Analysis *http://www.menusforprofit.com* Designers of profitable menu programs for restaurants. [Exp. #179.]

Mojoe Multimedia *http://www.mojoe.com/* The power users search engine. [Exp. #179.]

Mystery Shop *http://www.interking.com/b/a/mysteryshop.html* Mystery customers needed. Reasonable pay. [Exp. #181.]

PAR Orthodontic Laboratory *http://www.parortho.com* Full service laboratory constructing high-quality, custom appliances for orthodontists nationwide. [Exp. #181.]

Pencom Web Works *http://www.pww.pencom.com* Pencom Web Works introduces Metaphoria Data Transformation Server 1.1, which provides easy and quick Internet/intranet access to data from multiple sources. [Exp. #180.]

Prepress Services *http://www.accu-color.com* Promoting our pre-press shop. [Exp. #181.]

Smart Dolly—Bottled Water Installer *http://www.smartdolly.com* Roll the bottle onto cradle, Smart Dolly lifts and loads automatically. No lifting, no spills. [Exp. #181.]

Tripweb *http://www.tripweb.com* Online airline reservations, car rentals, hotel reservations, cruise lines, passport and visa info, Disney packages, and general travel information. [Exp. #181.]

Vita Books *http://www.vitabooks.com* A health, wellness, and longevity cyberstore containing great books, herbal and nutritional products. [Exp. #179.]

Financial/Real Estate Services

1% Homeseller *http://www.1homeseller.com* Discounted real estate fees, buyer rebates, homes for sale by owner in Southern California. [Exp. #181.]

American Capital Loans *http://www.debthelp.cc/* Providing loans for homeowners with no equity required. [Exp. #181.]

Bancared *http://bancared.net* Banking services. [Exp. #179.]

Castle Resale *http://www.castle-re-sal.com* Specializing in resale homes in Orange County since 1971. Worldwide referral and relocation, income properties and exchanges. [Exp. #179.]

HomeShark *http://www.homeshark.com/* The leading online mortgage and real estate services company. [Exp. #181.]

The Index Investor *http://www.indexinvestor.com* Asset allocation newsletter for index fund investors. [Exp. #179.]

The McLean Group *http://www.mcleangroup.com/* Real estate developers. [Exp. #181.]

Michael Gray, CPA *http://www.innetix.com/~mgraycpa* Visit our site for income tax planning ideas, including dealing with Incentive Stock Options and the Alternative Minimum Tax, and for small business improvement strategies. [Exp. #179.]

RateNet *http://www.rate.net* Mortgage, CD, auto and credit card interest rates are ranked and compared daily for over 11,000 financial institutions at RateNet. [Exp. #181.]

Stern Financial Services *http://mpb.com/sfs/* Retirement planning for educators. SFS offers personalized services and products to meet your individual financial needs. [Exp. #180.]

Legal Services

Ask A Lawyer *http://www.ask-a-lawyer.com* [Exp. #179.]

NetCourt Web Site *http://www.interNetCourt.com* NetCourt is a leading provider of online trial and expert witness transcripts produced by court reporters from around the country. [Exp. #180.]

Richard J. Greenstone, Attorney at Law *http://www.rjg.com/* Copyright, trademark, licensing, business, and transactional law for the computer, entertainment, and publishing industries. [Exp. #181.]

Employment/ Education

Ascolta Training Co. *http://www.ascoltatraining.com* Authorized training for Cisco, Microsoft, and Netscape. Validated Internet/intranet fundamental course. Convenient Bay Area and So. Cal. locations. [Exp. #179.]

Benjamin Franklin Institute Of Global Education *http://www.bfranklin.edu* Dedicated to lifelong learning opportunities, whether through traditional school divisions (K-12, college, and university), or through on-the-job training. [Exp. #179.]

Berklee College Of Music *http://www.berklee.edu* [Exp. #180.]

California Contractors Exam Preparation School *http://www.contractorschool.com* [Exp. #179.]

ConsultLink *http://www.consultlink.com* Over 19,000 computer consultants contractors are represented in the ConsultLink Web site. [Exp. #180.]

Encyclopedia Britannica's Guide To Black History *http://blackhistory.eb.com* [Exp. #179.]

Graduate Ranking *http://www.usnews.com/usnews/edu/beyond/bcrank.htm* US News & World Reports graduate school ranking site. [Exp. #179.]

HTML Spoken Here *http://www.geocities.com/~jimhanson* Free tutorial teaches you how to create your own Web page. [Exp. #180.]

continued on page 148

HyperSurf Internet Services

1-Week Free PPP Trial!

800# Dial Service Now Available

Centrex ISDN • Frame Relay • Co-Location

Microsoft® FrontPage98 SUPPORT SPECIALIST

Secure Business Transaction Services & Support

PERSONAL ACCOUNTS
UNIX Shell 33.6 Dial-Up
E-Mail
News Feed
PPP Account
FREE Support
Internet Explorer
FREE Web Page
No Set-Up Fee
$19.99/mo.

BUSINESS ACCOUNTS
UNIX Shell
33.6 Dial-Up
E-Mail
E-Mail Aliases
News Feed
PPP Account
FREE Support
Internet Explorer
CGI Scripting
www.Your Name.com
20MB Storage
$35/mo.

ISDN 1B CHANNEL
UNIX Shell
E-Mail
News Feed
PPP Account
FREE Support
Internet Explorer
FREE Web Page
No Set-Up Fee
$39.99/mo.

WEB-HOSTING & DESIGN
Complete Site Hosting
CGI Scripting
www.Your Name.com
Tape Backup
Free Support
20MB Storage
T1 Access
$25/mo.
We Also Offer Site Design

DEDICATED CONNECTION
33.6 Dial-up
Centrix ISDN
Frame Relay 56K-T1
Technical Support Services for UNIX & Windows Available
Access to Our Mail Server Included
Prices Start at $119/mo.

CO-LOCATION
T1 Connection Speed
Locations Thoughout the Bay Area
Dial-Up Access Included
All Platforms Supported
Technical Support Services for UNIX & Windows Available
Access to our News Server Included
Access to our Mail Server Included
Prices Start at $299/mo.

HyperSurf Internet Services

Fremont 510-608-7873
San Jose 408-261-5959
Oakland 510-986-6767
Fax: 510-608-7870 www.HYPERSURF.com
e-mail: SALES@HYPERSURF.com

LOOK AT THIS

486-DX 4 100 Mhz Intel CPU fr... $ 35
56k Fax modem Sound blaster combo $68
6.5 GB ide hard frju Dr... $ 192
2.1 GB seagate SCSI Barracuda $ 179
...Availabilit. & Prices Subject to Change Without Notice & Reflect Cash and Carr. Discount

17" Hyundai MONITOR $299
Intel 100/10 PCI net $87
Cirrus logic 1 MB SVGA20
512 svga card ... $14
VLB 16 M COLOR $22
EGA/CGA CARD $25/17
KODAK / FUJISTSU PARTS
MOUO CARD ... $12
sb 64 sound card $82.0

USed 14" SVGA Monitors from ... $ 75
PS/2 MODEL 80 computer ... $ 35
Apple Mac II or IIcx etc LOW $ call
256k pipe line cache low $11.00

Notebook PC Repair and UPGrades
Best Service...LOWest Prices
2.6 GB WDr DRIVE ide 138
6.4GB Quantum dr $192.00
1.08GB Seagate DR 93.00
120 MB, CONNER... $ 33.00
4GB Seagate SCSIFast 289
40MB,120,170,420 IDE&SCSI
56/33.6/14.4 x Bos FAX/MODEM $45/69/12

ADAPTEC 2940... PCI ... $172
ADVANTSYS ... SCSI ... $109
CONTROLLER / IDE/ESDI/MFM/SCSI
RLL/AT/XT CONTROLLERS WE HAVE IT

CPU'S & MATH - CO
WE WILL BEAT ANY CPU PRICE!!
We special on Hard to find parts !
486 dx2 /66 mhz ... $22
486drx2-50 /SR-2-50 26
pentiumm TM 90/100 $62
8087/28 / MATH ... $ 18
Cyrix 233mmx ... $ 89
387-33 MATH-CO ... $ 19

COLOR IBM ED360 PORTABLE $1785.00
H.Brother Ink printer...deskjet.fm: $69
44 / 1 2/2.88 FLOPY Mtitsumi / II AC.16/3

Main Board & Simm
Atlantis Main Board Intel PCI $ 175
486 / DX / DX2 MB 256K cache $ 32
486/ SLC2 / 66 MHZ math.VLB $ 45
586 AMD main BOARD & CPU $79.00
Pentium (tm) Main board w pipe C $74.00
486 DX 100/80 MAIN B 72/30 PIN $ 39.0
256k/512 pipe line cache $11.85/2.00
16 MEG SIMMS $21.00 4 MB SIMM 6.70
BEST PRICES 30 pin 4 MEG SIMMS - 13.85
32k*8 cache-3 2. Intel CPU PULLER 2.00

Palo Alto Micro
http://www/inetbiz.com/pam
dpamc@aol.com

3483 EL CAMINO REAL
PALO ALTO, CA 94306
TEL:(415) - 493 - 8209
(415) - 493 - 7978
(415) - 493 - 8217
FAX:(415) - 493 - 4572

Since 1985 the Best Service in the Bay!

We Carry Intel, Anchorage, Atlanta, Seattle & Dakota Redwood-Dual PII CPU M/B

SPECIAL BUNDLES

- ASUS-SP97-V Main Board w/200/233MMX $195/229
- HOT 579 Main Board w/200/233MMX CPU $189/219
- HOT 637 Main Board w/233/266 PII CPU $339/385
- 16 Bit 3D Sound Card + 24X CD-ROM w/80W Speakers $99
- HOT 555A Main Board w/AMD 233 CPU $179

ECI ULTRA DVD PARTNER

- **ASUS TXP4-X ATX M/B w/512K**
- **Intel Pentium Processor w/MMX**
- 64MB RAM Exp. To 256MB (SIMM)
- 1.44MB Floppy Drive
- 6.4GB UIDE H.D.
- **Creative LABSPC-DVD Encore DXR2**
- **Sound Blaster AWE 64 Value (OEM)**
- **ATI ALL IN WONDER PRO w/4MB AGP**
- **Diamond Supra V.90 Fax/Modem**
- "ATX" Mid-Tower Case w/235W P.S.
- 160W Amplified Stereo Speakers
- ECI 104-Key PS/2 Keyboard
- Microsoft Intelli PS/2 Mouse w/Pad
- Windows 95 CD (OEM) Monitor Not Included

233MHz (Intel) $1,359
AMDK6-233 .....$1,299

ECI DELUXE CAD PARTNER

- **Intel Pentium II Celeron Processor**
- **Pentium II 440 LX Chipset Hot-637 M/B**
- **64MB SDRAM DIMM Exp. To 384MB**
- 1.44MB Floppy Drive
- **8.4GB UIDE H.D.**
- **32X EIDE CD-ROM Drive**
- **Sound Blaster AWE 64 Value (OEM)**
- **Matrox Productiva G100 8MB AGP**
- 56K Internal Fax/Modem w/Voice
- "ATX" Mid-Tower Case w/235W PS
- **Yamaha M-7 Amplified Stereo Speakers**
- ECI 104-Key Keyboard
- Logitech PS/2 Mouse w/Pad
- Windows 95 CD (OEM) Monitor Not Included

Pentium II 266MHz..$1,129

ECI HOME/OFFICE PERFORMER PARTNER

- **Intel Pentium II Processor w/512K**
- **Integrated L2 Cache 100MHz BUS**
- **Intel SE440BXPA Seattle w/PCI Audio**
- **64MB SDRAM 100MHz DIMM Exp.To 384M**
- 1.44MB Floppy Drive
- 4.3GB UIDE H.D.
- 32X EIDE CD-ROM Drive
- **3D PCI Sound on Board**
- **Intel Express 3-D Graphics w/4MB AGP**
- **Diamond Supra V.90 Fax/Modem**
- "ATX" Mid-Tower Case w/235W PS
- Yamaha M-7 Amplified Stereo Speakers
- 104-Key Keytronics PS-2 Mouse w/Pad
- Microsoft PS/2 Mouse w/Pad
- Windows 95 CD (OEM) Monitor Not Included

Pentium II 350MHz..$1,695

ECI WORKSTATION PARTNER

- **ASUS-SP97-V M/B/512K Cache**
- **Intel Pentium® MMX or AMD K6 CPU**
- 16MB Memory Exp. to 128MB
- 1.44MB Floppy Drive
- 2.1GB Hard Drive
- 24x IDE CD-ROM Drive
- Built-In 64 PCI Graphic Engine
- Mini-Tower Case w/230W P.S.
- 104 Key Win95 Keyboard
- PS/2 Mitsumi Mouse w/Pad
- Windows 95 (OEM, CD Ver.) Monitor Not Included

Intel® P5 MMX
200/233.....$549/585
AMD K6-233 .....$529

ECI HOME PARTNER MULTIMEDIA

- **Shuttle Hot 579 M/B w/512K Cache**
- **Intel Pentium® Processor w/ MMX Technology**
- 32MB RAM, Exp. to 128MB
- 1.44MB Floppy Disk Drive
- **2.6GB UIDE Hard Disk Drive**
- 24X EIDE CD-ROM Drive
- 16-Bit 3D Sound Card
- S3 64 SVGA Card w/2MB DRAM
- 56K Internal Fax/Modem w/Voice
- Mini-Tower Case w/230W PS
- Stereo Speakers (80W) #69IN
- Enhanced 104-Key Keyboard
- Mitsumi Serial Mouse w/Pad
- Windows 95 (OEM CD-ROM Ver.) Monitor Not Included

200MHz MMX $539
233MHz MMX.....$669

ECI ULTIMATE PARTNER

- **Intel Pentium® II Processor w/512K Integrated L2 Cache**
- Intel AL 440LX "**Atlanta**" "ATX" Board
- 32MB SDRAM DIMM Exp to 384MB
- 1.44MB Floppy Disk Drive
- **6.4GB** Hard Disk Drive
- 32X EIDE CD-ROM Drive
- **Sound Blaster AWE 64 Value (OEM)**
- 2 - PCI EIDE Controller & FDC on Board
- 2 - USB, 2 - 16550 Serial & EPP on Board
- **Diamond Viper AGP w/4MB SGRAM**
- 56K Internal Data/Fax Modem (USR OEM)
- "ATX" Mid Tower Case w/235 W.P.S.
- Yamaha M15 Amplified Stereo Speakers
- Enhanced 104-Key PS/2 Keyboard
- Microsoft PS/2 Mouse
- Windows 95 (OEM, CD-ROM Version) Monitor Not Included

Pentium® II 266MHz .$1239
Pentium® II 300MHz .$1369
Pentium® II 333MHz .$1519

ECI SERVER PARTNER

- **Intel Pentium® II Processor w/512K Integrated L2 Cache**
- **Intel Seattle SE440BXIA 100MHz**
- 64MB 100MHz DIMM Exp. To 384MB
- 1.44MB Floppy Drive
- **4.3GB Ultra SCSI Hard Drive**
- 24X EIDE CD-ROM Drive
- **Ultra SCSI PCI Controller**
- **HP 4.0GB SCSI DAT Tape Backup**
- **Matrox Productiva 4MB AGP & SVGA Card**
- "ATX" Mid Tower Case w/300W PS
- Enhanced 104-Key PS/2 Keyboard
- LogiTech PS/2 Mouse
- Windows 95 (OEM CD-ROM Version)
- APC Smart-UPS 700NET **ADD $389**
- **NT Server 4.0 for 5 Licenses ADD $395** Monitor Not Included

Pentium® II 350MHz.....$2369
Pentium® II 400MHz.....$2595

ECI INTERNET PARTNER

- **Intel Anchorage AN430TX ATX M/B**
- **Intel Pentium® Processor w/MMX Technology**
- 512K Pipeline Burst L2 Cache
- 32MB 10ns DIMM Exp. to 256MB
- 1.44 MB Floppy Drive
- **5.2GB IDE Hard Drive**
- **32X EIDE CD-ROM Drive**
- **Yamaha OLP4 SA on Board**
- 56K Internal Fax/Modem w/Voice
- **Diamond Stealth 64 3D w/4MB VGA Card**
- ATX Tower Case w/235W Power Supply
- Amplified Stereo Speakers 160W
- ECI 104 Keyboard w/PS/2 Style
- Microsoft OEM PS/2 Mouse w/Pad
- Windows 95, CD-ROM Ver. Monitor Not Included

200MHz MMX $879
233MHz MMX $899

ECI OFFICE PARTNER

- **Intel Anchorage AN430TX 512 Cache M/B**
- **Intel Pentium® Processor w/MMX Technology**
- 32MB RAM, Exp. to 256MB(60ns)
- 1.44 MB Floppy Drive
- **4.3GB UIDE Hard Drive**
- **32X CD-ROM Drive**
- **Yamaha OLP4SA on Board**
- 56K Internal Fax/Modem w/Voice
- ATI PC1 w/2MB SVGA on Board
- ATX Tower Case w/235W PS
- Amplified Stereo Speakers 160W
- ECI 104-Keyboard PS/2 Style
- LogiTech OEM PS/2 Mouse w/Pad
- Microsoft OEM Serial Mouse w/Pad
- Windows 95 (OEM, CD-ROM Ver.)
- **MS Word 97 • MS Works 4.0**
- **MS Arcade • MS Internet**
- **MS Internet • MS Home Essentials 97** Monitor Not Included

200MMX $899
233MMX $939

FAX MODEMS

US Robotics

33.6/Sportster V.34 Int/Ext #840/839 ..... $89/109
56K Courier Int/Ext $225/249
V.90 ITU Standard Int/Ext $159/179
56K/Sportster w/Voice Int/Ext $155/175

MOTOROLA (OEM)

56K Modem Surfer Int/Ext $95/119
56K Voice Surfer Int/Ext $99/125

Pragmatic

56K Fax Modem Int. w/ Voice $69
33.6 Fax Modem Int. w/ Voice $45

ETHERNET CARDS

3Com

3COM 3C509 B-TPO/Combo ISA..... $49/65
3COM 3C900 PCI TP/Combo..... $59/79
3COM 3C905TX B 10/100 TP/5 Pack..... $69/329
3COM 8-Port 10 Base-T Hub 3C16180..... $109

intel.

PILA 8460B 100TX/5 Pack..... $51/249

SMC

Ether EX PnP 16-Bit ISA 8416BT Combo $59
8432TX 100BaseTX $59
5312TX 12-Port 100TX Hub $739

MOTHERBOARDS Call for Products Not Listed (CPU Not Included)

intel.

Dakota Dual Pentium® II DX 400LX..... $469
Atlanta Pentium® II "ATX" AL440LX..... $159
Atlanta Pentium® II "ATX" AL440LX w/Audio ... $179
Anchorage w/512K/Audio/ATI 2MB 430TX $209
Anchorage w/512K & Audio 430TX "ATX" $179
Seattle Pentium® II ATX SE440BXIA $199
Seattle Pentium® II ATX SE440BXPA..... $219

ASUS

SP97-V P75-233 w/512K $79
TX97XE P75-233 430TX (ATX) $139
P2L97 SCSI Pentium® II ATX 440LX $249
P2L97 Pentium® II ATX 440LX .. $155

Abit

LX6 Pentium® II 440 AT Jumperless..... $145
PX 5 P75-233 512K AT Jumperless..... $89
PD5A P75-233 512K AT Jumperless..... $79

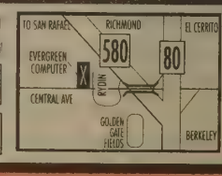
Shuttle (Spacewalker)

HOT-579 512K Via P75-233MMX AT..... $79
HOT-637 Pentium® II 440LX (ATX)..... $119
HOT-635 Pentium® II 440LX w/SCSI (ATX) $259
HOT-555A 512K P75-233MMX 430VX $85
HOT-591P 512K 100MHz BUS w/AGP ..... $CALL

EVERGREEN

Computer International, Inc.
2700 Rydin Road #C, Richmond, CA 94804
(510) 526-8667 **FAX (510) 526-1447**
E-mail eci@pacbell.net

VISA MasterCard DISCOVER POs



Computer/Printer Upgrades & Repair Specialists!

Authorized Dealer for HEWLETT PACKARD · Microsoft · brother · IBM · intel

NOTEBOOKS

Acer · FUJITSU · IBM · HITACHI MOBILIZED COMPUTING

TOSHIBA NOTEBOOK

MODEL#	CPU	HD	RAM	CD	MDM	SCREEN	PRICE
750 DVD	233MMX	5.1	64	DVD	56k	13.3TFT	$CALL
750 CDM	233MMX	5.1	32	20X	56k	13.3TFT	$CALL
730 CDX	150MMX	2.1	16	10X	28.8	12.1TFT	$CALL
530CDT	166MMX	2.1	32	10X	33.6	12.1TFT	$CALL
520 CDT	166MMX	2.1	32	10X	33.6	12.1TFT	$CALL
480 CDT	233MMX	3.8	32	10X	33.6	12.1TFT	$CALL
470 CDT	200MMX	2.1	32	10X	33.6	12.1TFT	$CALL

Acer EXTENSA

MODEL#	CPU	HD	RAM	CD	MDM	SCREEN	PRICE
391T	150MMX	2.1	16	20X	NO	12.1TFT	$1895
392T	166MMX	3.2	32	20X	NO	12.1TFT	$2195
393T	166MMX	2.1	32	20X	NO	12.1TFT	$1849
394T	200MMX	3.2	32	20X	NO	12.1TFT	$2489
395T	233MMX	3.2	32	20X	NO	12.1TFT	$2695

IBM® THINK PAD

MODEL#	CPU	HD	RAM	CD	MDM	SCREEN	PRICE
380 D 26353AU	150MMX	2.1	16	8X	NO	12.1TFT	$2079
380 ED 2635 5AU	166MMX	2.1	16	20X	NO	12.1DSTN	$1879
380 ED 26356 AU	166MMX	3.0	16	8X	NO	12.1TFT	$2759
560 E 264040 U	166MMX	2.1	16	NO	NO	12.1TFT	$2889
760 XL 9547U9C	166MMX	2.1	16	OPT	NO	12.1TFT	$3929
770 954830 U	233MMX	4.0	32	OPT	NO	13.3TFT	$4295
770 9548 40U	200MMX	3.2	32	OPT	NO	13.3TFT	$3695

FUJITSU LIFE BOOK

MODEL#	CPU	HD	RAM	CD	MDM	SCREEN	PRICE
985 TX	233MMX	5.0	32	20X	56K	13.3TFT	$4295
675 TX	200MMX	3.2	32	OPT	56K	12.1TFT	$3629
635 TX	133MMX	2.0	16	OPT	33.6	12.1TFT	$1819

HITACHI VISION BOOK

MODEL#	CPU	HD	RAM	CD	MDM	SCREEN	PRICE
5260	166MMX	2.1	16	20X	56K	12.1DSTN	$1579
5280	233MMX	2.1	16	20X	56K	12.1DSTN	$2069
7580	233MMX	4.0	32	20X	56K	13.3TFT	$3595
1120	233MMX	4.3	32	20X	56K	13.3TFT	$2939
7370	200MMX	3.2	32	20X	56K	12.1TFT	$2895
7590	266MMX	4.0	48	20X	56K	13.3TFT	$3995

*PLEASE CALL FOR ANY MODEL NOTEBOOK INFORMATION

UPGRADES NOTEBOOKS by Addonics Technologies

20X MAX PCMCIA Pocket CD	$269
20X MAX Parallel Port Pocket CD	$199
24X Ext. Parallel Port for Notebook & Desktop PCs	$235
Pocket 2.5" Parallel Port Hard Disk 1.0GB	$239

PC HARD DRIVES

Quantum™

3.2GB UIDE 33240ST-A	$155
4.3GB UIDE 34320ST-A	189
6.4GB UIDE 36480ST-A	229
2.2GB UWS XP32275W	205
3.2GB SCSI ST3240S	245
4.5GB SCSI QM 34550SW	449

FUJITSU

3.2GB UIDE 3026AT	$149
4.3GB UIDE 3043AT	169
5.2GB UIDE 3052AT	199
6.4GB UIDE 3064AT	225

Maxtor®

8.4GB UIDE 88400D	309
11GB UIDE 91152D	$425

WESTERN DIGITAL

2.1GB EIDE 22100	$145
2.5GB UIDE 22500	149
3.2GB UIDE 33200	159
4.3GB UIDE AC34300	179
5.1GB UIDE 35100	209
6.4GB UIDE 36400	229

Seagate

2.5GB EIDE ST52520A	$139
4.3GB EIDE ST34342	179
4.5GB SCSI ST34573NW	499
9.1GB WSCSI ST19101W	939
9.1GB SCSI ST19173N	779
9.1GB WSCSI ST19173SW	799

CD-ROM DRIVES

TOSHIBA

24X IDE XM-6102B	$79
32X IDE XM-6201B	89
12X SCSI XN-5701B	95

YAMAHA (Rewritable)

4x6x2 IDE CRW 4001 w/SW	$465
4x6x2 SCSI CRW 4260 w/SW	525

SONY (Recordables)

2x8 IDE CD-R CDU928 E/H w/SW	$CALL
2x6 SCSI CD-R CSP-960 w/SW	$359

EXTERNAL SCSI DRIVE CASES

- High Quality Metal Cases
- Noise-Free Fan
- External SCSI ID Switch

3.5" or 5.25" SCSI-I	$49/55
Two (2) 5.25" SCSI-I/II/III	85/115/129
Four (4) 5.25" SCSI-I/II/III	105/139/159
Eight (8) 5.25" SCSI-I/II/III	215/259/289

APC™ AMERICAN POWER CONVERSION

BACKUP POWER SUPPLIES AT

APC 280VA Back-UPS	$109
APC 450VA Back-UPS	175
APC 600VA Back-UPS	239
APC 1000 Backup-UPS Pro	379
APC 1000 Smart-UPS	469
APC 1400 Smart-UPS	619

MONITORS

OPTIQUEST (BY VIEWSONIC)

15"	Q51	1024x768	.28	$209
17"	Q71	1280x1024	.28	349
19"	V95	1600x1280	.26	709

PROTON

15"	GM1571	1280x1024	.28, AT 60Hz	$199
17"	GM770R	1280x1024	.28	339

HITACHI

15"	CM500U	1280x1024	.28	$239
17"	CM620U	1280x1024	.28	455
17"	CM630	1600x1200	.22	609
19"	751	1600x1200	.22	785
21"	CM800U	1600x1200	.22	999
21"	CM803U	1800x1440	.22	1479

VIEWSONIC

14"	E641	1024x768	.28	$179
15"	P655	1280x1024	.28	279
17"	GS771	1280x1024	.27	419
17"	G771	1280x1024	.27	425
17"	G773	1280x1024	.26	449
17"	E771	1280x1024	.27	355
19"	G790	1600x1280	.26	769
21"	G810	1600x1280	.25	985
21"	P810	1600x1280	.25	1089
21"	P815	1800x1440	.25	1219

SONY

15"	100ES	1280x1024	.25	$299
15"	100GS	1280x1024	.25	349
17"	200ES	1280x1024	.25	549
17"	200GS	1280x1024	.25	629
19"	400PS	1600X1200	.25	939

NEC

15"	M500	1280x1024	.25	$365
15"	A500	1280x1024	.28	279
17"	E700	1280x1024	.25	575
17"	A700	1280x1024	.28	485
21"	P1150	1600x1200	.28	1179

TAPE BACKUPS

IOMEGA TAPE DRIVES

7.0GB Ditto Max Int/Ext	$199/209

HEWLETT PACKARD

4.0GB SCSI 4mm DAT C1536 Int	$559
8.0GB SCSI 4mm DAT C1528H Int	849
24GB SCSI 4mm DAT C1555B Int	1199
3.2GB T-3000 Internal w/Tape	179
5.0GB C4354A IDE w/Tape Int	209

SYQUEST TAPE DRIVE

230MB EZ Flyer IDE Int	$149
230MB EZ Flyer Parallel Ext.	149
230MB EZ Cartridge 1 pcs/10 Pak	19/185
SPARQ 1GB IDE INT	185
SPARQ 1GB Parallel Port Ext	195
1.5GB SYJET SCSI Int/Ext	275/299
1.5GB SYJET Parallel Ext	285
1.5GB SYJET IDE Int	275
1.5GB SYJET Cartridge 1 pcs/3 Pak	59/169

iOMEGA ZIP/JAZ DRIVE

100MB Zip Drive IDE Internal (OEM)	$89
100MB Zip Cartridge 3 Pak/10 Pak	35/109
1GB JAZ Drive Int./Ext. SCSI	275/289
2.0GB JAZ Drive Int./Ext.	499/599
1GB JAZ Cartridge 3 Pak/5 Pak	235/385

PRINTERS

HEWLETT PACKARD

LASERJET PRINTERS

6LXi, 1MB, 6ppm, 600dpi	$389
6PXi, 2MB, 8ppm, 600dpi	739
6MP, 3MB, 8ppm, 600dpi	879
4000 4MB, 17ppm, 1200dpi w/2 Trays	1095
4000T 4MB, 17ppm, 1200dpi w/3 Trays	1249
4000N 8MB, 17ppm, 1200dpi w/2 Trays	1399
4000TN 8MB, 17ppm, 1200dpi w/3 Trays	1559
5000 4MB, 16ppm, 1200dpi	1519
5000 N/5000 GN 8MB/12MB (LAN)	2095/2669
8000/8000N 16MB, 24ppm, 1200dpi	CALL
8000DN 24ppm, 24MB, 1200dpi	CALL
Color LaserJet 5, 20MB 7B, 3 Color	3779
Color LaserJet 5M, 36MB, 7B, 3 Color	4869

DESKJET PRINTERS

670C 600x600	$205
692C 600x600	255
720C 600x600	349
890CXI 600x600, 9ppm	395
1600C 600x600	1289
1120xi 600x600 Up to 11x17 PAPER (NEW)	495
2000Cxi/2000CN 10ppm, 600dpi NEW	CALL

EPSON®

LQ-2070 Plus 24 Pin 135 Columns	$399
LQ-570 Plus 24 Pin 80 Column	269
STYLUS Photo	339
STYLUS Color 600 1440x720 6 Black 4 Color	235
STYLUS Color 800 1440x720 8 Black 7 Color	299
STYLUS 1520 Support 17"x22" 1440DPI	729

SCANNERS

ScanJet 5S 600DPI 24 Bit Color	$195
ScanJet 5100CXi 600DPI 36 Bit Color	289
ScanJet 6100C 2400DPI 45 Bit	739
UMAX	
ASTRA 610P 600DPI 30 Bit Parallel	135
ASTRA 610S 600DPI 30 Bit SCSI	149
ASTRA 1200S DLS 1200DPI 30 Bit SCSI	249

OFFICE JET PRODUCTS

All-In-One: Color Printer Copier Scanner Fax Machines

HEWLETT PACKARD

OfficeJet 590 600x300dpi	$419
OfficeJet 630 up to 1200dpi	529
OfficeJet 1170C up to 1200dpi	795

brother

MFC 7000FC	$785
MFC 4450 PLUS	619

Canon

C5000	$489
C6000	575

VGA CARDS

ATI (OEM VGA Card)

X-pert@Work 4MB/8MB PCI SGRAM	$99/109
X-pert@Play 4MB/8MB PCI SGRAM	99/129
All-in-Wonder PRO 4/8MB PCI/AGP	229/269

DIAMOND (OEM VGA Card)

Stealth IIS 220 4MB PCI	99
Viper V330 4MB PCI/AGP	115/115
Fire GL 1000 Pro PCI 4MB/8MB	129/159

OTHERS

S3 PCI w/2MB	$39

MATROX

Millennium II 1600x1280 (OEM) 4MB/8MB WRAM (up to 16MB)	$CALL/CALL
Upgrade module for Millennium 4/8/12MB	$95/169/229
Matrox Mystique 220 2/4MB SGRAM	$73/85

HOURS: M-F 9-5:30 Sat 10-4
3 Years Labor, 1 Year Parts Warranty on Evergreen Computers.
Prices subject to change w/o notice.
Not responsible for typos.
Pentium® is a registered trademark of Intel Corp.
PRICES BASED ON CASH PRICES ONLY

Ask For Any Notebook & Laser Printer Memory Upgrades Please Call Us Thanks

(510) 526-8667

FAX (510) 526-1447 e-mail: eci@pacbell.net

EVERGREEN

Corporate POs Welcome • www.KINGSTARUSA.com

SYSTEM SUPER SALE!

INTEL PENTIUM® II 440BX BAREBONE SYSTEMS

Box SE 440BX PAO/RA Board
PII Processor Supports Highest 233MHz to 400MHz CPU
Intel 82440BXPA AGPset Supports Both 66MHz to 100MHz
Universal Serial BUS (USB)
64MB SDRAM to 384MB ECC Memory
1.44MB Floppy Drive
ATX Mid Tower Case w/Fan

Pentium® II 350MHz $1059
Pentium® II 400MHz $1259

INTEL PENTIUM® II 440LX BAREBONE SYSTEMS

PII 233MHz to 333MHz 440LX Chipset
AGP Overview Set
32MB SDRAM to 384MB RAM/EPROM
1.44MB Floppy Drive
ATX Mid Tower Case w/235W Power

Pentium® II 233MHz $450
Pentium® II 266MHz $499
Pentium® II 300MHz $619
Pentium® II 333MHz $759

FAMILY SYSTEM SPECIALS

- Intel TX P5 Motherboard w/512K Cache
- P5 Motherboard w/512K Cache
- PCI EIDE High Speed I/O Controller
- 16MB 60ns EDO RAM
- 1.7GB Ultra DMA Hard Drive
- 1.44MB Floppy Drive
- PCI 64-Bit SVGA Card w/1MB (to 2MB)
- 104-Key Win 95 Keyboard
- Mini Tower Case w/230W Power Supply

Pentium® 166MHz $399

Intel® 200MMX/233MMX . $355/388
AMD K6-200/233MHz. $332/347

PLEASE SEE FULL PAGE AD ON PAGE 9

High Performance Multimedia Notebook

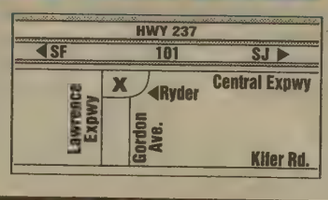
- ChemBook #3300
- 12.1"/TFT Scan
- 2.1GB Hard Drive/64-Bit Video Card with 2MB
- 32MB RAM up to 96MB
- Removable/Built-in 20X CD-ROM
- 2xType II or 1xType III PCMCIA/Card
- 1.44MB Removable
- 16-Bit Stereo/3D Sound System with Hardware WaveTable
- Infrared FIR/RCA Jack for Video In/Out/Dual USB Port/NiMH Battery

12.1" MATRIX	
166MMX	1429
200MMX	1489
233MMX	1595

Optional:
3.1GB . . . . . Add $65
64MB . . . . . Add $89
33,600 Fax Modem. . . . . Add $69
56K Fax Modem. . . . . Add $99
140T Docking Station . . . . . Call

KINGSTAR COMPUTERS, INC.

SANTA CLARA
3081 Lawrence Expwy • Santa Clara, CA 95051
TEL: (408) 736-8590 • FAX: (408) 736-4151
Since 1986
MON-FRI 8:30-6:00, Sat/Sun by Appt.
www.kingstarusa.com
Prices and Company Policy Subject to Change W/O Notice. Not Responsible for Typographic Errors. Prices Reflect Cash Price Only.



onlineguide | web page listings

Martin Luther King Jr. Papers At Stanford *http://www.leland.stanford.edu/group/King* [Exp. #179.]

Mr. Brain Tutor *http://members.tripod.com/~russmccor/tutor.htm* Live teachers online: Tutoring in mathematics, English, computer programming, history, writing, etc. [Exp. #181.]

New Job Site *http://www.nethunter.net* [Exp. #181.]

Oak Tree Systems, Inc. *http://www.oaktree-systems.com* Software solutions for training centers. [Exp. #180.]

PC Pros Information Staffing *http://www.pcprosla.com* The computer employment experts. Technical graphics, digital new media, and administrative positions available. [Exp. #179.]

People Link's New World Village *http://www.peoplelink.com* People-Link, in partnership with Michael Albert, announces a new, progressive, online school, the Learning OnLine University. [Exp. #179.]

Teach Your Child To Swim With Aqua Tykes *http://www.aquatykes.com/* Teach your child to swim with ease and confidence! [Exp. #181.]

TEMP 24-7 *http://www.temp24-7.com* Dedicated to the weird world of temporary employment. [Exp. #179.]

Useful Links *http://www.yorku.ca/sts/links.html* A collection of pointers of interest to students and researchers in the field of science and technology studies. [Exp. #179.]

Organizations

Afro-Americ@'s Black History Museum *http://www.afroam.org/history.html* [Exp. #179.]

Amnesty International *http://www.amnesty.org* Campaigns for fair trials, prisoners of conscience, and against torture, degrading, or inhumane treatment. [Exp. #180.]

Condo Management Online *http://www.condomgmt.com/* The premier resource for community associations. [Exp. #181.]

Cult Awareness Resources, CARES *http://cares-cares.org* Provides information to the campus community about cult activity, including International Churches of Christ information. [Exp. #180.]

Doctors Of The World *http://www.doctorsoftheworld.org* Dedicated to improving the health and relieving the suffering of vulnerable people throughout the world. [Exp. #180.]

Global Fund For Women *http://www.globalfundforwomen.org* A grant making foundation that provides flexible, timely assistance to grassroots women's groups around the world. [Exp. #180.]

Institution of Incorporated Engineers *http://www.iie.org.uk/iie* The UK's largest professional association in electronic, electrical, and mechanical engineering for incorporated engineers and engineering technicians. [Exp. #181.]

Jewish Scientist Network *http://www.jsn.org/jsnhome.html* An information server based on reader submission of articles, news, links, references, etc., all pertaining to Jewish issues relating to the sciences or scientific issues. [Exp. #180.]

Los Angeles Macintosh Group *http://www.lamg.org* Non-profit user group offers training programs, meetings, monthly magazine, employment, networking, and tech support. [Exp. #179.]

Main Street United Methodist Church *http://www.jfsi.com/msumc.htm* Kernersville, North Carolina's friendliest and most vibrant Church. [Exp. #181.]

Master Of Light Institute *http://www.geocities.com/Hollywood/Studios/8378* Enlightenment through film making as preached by Revdonaldo. [Exp. #179.]

NAACP *http://www.naacp.org* [Exp. #179.]

National Center For Employee Ownership *http://www.nceo.org/* Articles, columns, discussions, and interactive training on employee stock ownership plans, stock options, etc. [Exp. #179.]

NetAction *http://www.netaction.org/training* NetAction's Virtual Activist, a comprehensive training course on cyberactivism, is now on the Web. [Exp. #180.]

New 1998 NACA Web Site *http://www.naca.org/index.html* [Exp. #180.]

Nizkor *http://www.nizkor.org* Transcripts from the Nuremberg trials of convicted Nazi war criminals are now posted to the Web by Nizkor. [Exp. #180.]

NOCCC (North Orange County Computer Club) *http://www.noccc.org* Web page of computer user group. Meetings: 1st Sunday of the month, 9:00 am, Chapman University, 333 N. Glassell Ave., Orange. [Exp. #180.]

Performance Animation Society *http://www.PASociety.org* 3-D character and performance animation/motion capture SIG. [Exp. #181.]

Rainforest Foundation *http://www.charityprofile.co.uk/rainforestfoundation.html* Est. in 1989 by Sting and his wife, Trudie Styler, to help save the Brazilian rainforest. [Exp. #180.]

Santa Clarita Valley's PC Group *http://www.smartlink.net/~scvpcg* The Santa Clarita Valley's PC Group is dedicated to PC literacy. Come join us. [Exp. #180.]

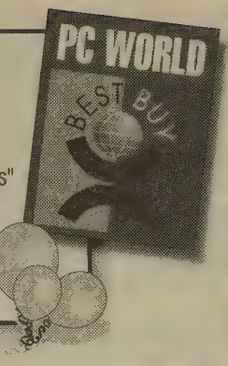
SFAUG: San Francisco Auto-CAD Users Group *http://www.sfaug.org* Meets 1st Monday each month, 6-8:30, usually at the SFSU Downtown Center at 425 Market St. [Exp. #180.]

Rave Reviews! Great Products! ★★★★

"Good performance, reasonable price"
PC World, March 1998

"Solid components, crisp monitor, good performance for its processor class"
PC World, January 1998

"Fast, good price for Pentium Pro-200MHz"
PC World, January 1997



NETiS MMX SERIES

- PCI Pentium MMX Motherboard
- Intel Pentium® MMX Processor
- 512K Cache w/Cooling Fan
- 32MB EDO RAM, exp. to 128MB
- 3.2GB Ultra IDE Hard Drive
- Teac 1.44MB Floppy Drive
- ATI 3D XPression w/4MB DRAM
- Toshiba 24X EIDE CD-ROM
- Supra 56K Internal Fax Modem
- SoundBlaster AWE64 PnP Sound Card
- Amplified 60W Speakers
- Middle Tower Case/Keyboard/Mouse
- 17" NI .28mm dpi Monitor
- MS Windows 95
- 1 Year Parts & Labor Warranty

FREE Anti-Virus Software By Trend Micro & Mousepad w/System Purchase

intel inside pentium

166MHz MMX	$1298
200MHz MMX	$1312
233MHz MMX	$1324

NETiS STARBURST

- Pentium II Motherboard w/Intel AGPset
- Intel Pentium II Processor w/512K Cache
- 32MB SDRAM DIMM Memory
- 3.2GB Ultra IDE HD
- Teac 1.44MB Floppy Drive
- Matrox Millenium II AGP w/4MB WRAM
- Toshiba 24X EIDE CD-ROM
- US Robotics 33.6K Internal Fax Modem
- Sound Blaster 16-bit Sound Card
- Amplified 60W Speakers
- ATX Middle Tower Case w/Power Supply
- 104-Key Enhanced PS2 Keyboard
- 17" NI .28mm dpi SVGA Monitor
- MS Windows 95
- 1 Year On-Site Part & Labor Warranty

PC WORLD Best Buy intel inside pentium

233MHz	$1538
266MHz	$1598
300MHz	$1701
333MHz	$1898
350MHz	$Call
400MHz	$Call

COMPAQ SERVER

- ProLiant 800 6/200 Server
- Intel Pentium® Pro 200MHz CPU w/256K
- 32MB ECC DIMM Memory
- Non-Pluggable 2.1GB UW SCSI Hard Drive
- Integrated Ultra Wide SCSI Controller
- Teac 1.44MB Floppy Drive
- Integrated SVGA w/1MB DRAM
- 8X EIDE CD-ROM
- Keyboard and Mouse
- Sampo 14" Non-interlaced SVGA Monitor
- Netelligent 10 T/2 PCI UTP Network Card
- Integrated Insight Manager Software
- 3 Years On-site Warranty

intel inside pentium

▶ Server with 128MB memory **$3689**

$3033

HP BRIO

- Brio PC 8034
- Intel Pentium® 200MHz MMX CPU
- 256K Pipelined Burst Cache
- 32MB EDO SIMM Memory
- Integrated PCI EIDE Controller
- 2.1GB EIDE Hard Drive
- 1.44MB Floppy Drive
- S3 Trio 64 w/1MB DRAM
- 16X EIDE CD-ROM
- Sound Blaster Compatible Sound Card
- Keyboard & Mouse
- MS Windows 95
- 3-Year Warranty w/1st Year On Site

intel inside pentium

▶ **Please call for other models and options**

$969

COMMUNICATIONS

Plug & Stor™ 100

For easily expanding, managing, and sharing storage on a network
PS100EX-1 (1-SCSI Channel)
Pentium 200MHz MMX w/32MB EDO RAM

Special **$1199**

Novell Intranetware 4.11	Call
MS NT 4.0 w/5-User (OEM)	$459
MS NT 4.0 workstation (OEM)	$174
4-Port/9-Port 10BT Hub	$49/$66
16-Port/24-Port 10BT Hub	$113/$229
4-Port/8-Port 100BT Hub	$98/$259
D-Link ProFAST 10/100 Adapter	$47
3Com ISDN Modem	$222
3Com PCI 905TX 100BT Ethernet	$68
Intel PCI 100BT Ethernet	$64
Ascend Pipeline 50	$617
Ascend Pipeline 75	$680
Cisco 2501 Router	$1,789

One Stop Shopping For Corporate NETWORK SOLUTIONS

- Networking Hardware/Software
- Network Design, Installation & Training
- Turnkey Solution/System Integration
- Internet Connectivity Solution
- Top-Notch Expertise/Support in Novell
- NetWare, UnixWare, Windows NT,
- SCO UNIX/ODT, Solaris, Lantastic &
- TCP/IP Networking
- File/Print Server
- NetWare/UNIX Connectivity
- Internet E-Mail Gateway
- Network Backup Server
- FAX Server
- CD-ROM Server
- Dial-in/Dial-out/Modem Server
- Storage Subsystems

NOTEBOOKS

COMPAQ

1550DMT - 5/133, 16MB, 1.4GB HD, 10x, 33.6, TFT	$1,799
7710MT-5/150MMX, 16MB, 1.6GB HD, TFT, 33.6	$2,106
4160T-5/166MMX, 16MB, 2GB HD, TFT	$2,540
4210T-5/233MMX, 32MB, 3GB HD, TFT	$3,519

TOSHIBA

440CDT-5/133MMX, 16MB, 1.44GB HD, 10x, 33.6, TFT	$1,774
470CDT 5/200MMX, 32MB 2GB HD, 10X, 33.6, TFT	$3,013
520CDT-5/166MMX, 32MB, 2.1GB HD, 10x, 33.6, TFT	$2,699

Twinhead

Slimnote 9T-5/166MMX, 16MB, 2.1GB HD, 20x, DSTN	$1,467
Slimnote TE-5/200MMX, 32MB, 2.1GB HD, 24x, TFT	$1,844
Slimnote TE-5/233MMX, 32MB, 2.1GB HD, 24x, TFT	$2,067

Please call for pricing on other products

PRINTERS

HEWLETT PACKARD

Color InkJet

692C, 5/1.7 ppm Black/Color	$264
720C, 8/4 ppm, black/color	$325
890Cxi, 9/5 ppm, black/color	$429

LaserJet

6Lxi, 6 ppm, 600 dpi	$432
5, 12 ppm, 600 dpi, 33MHz RISC	$1,057
4000, 17 ppm, 1200 dpi, 100MHz RISC	$1,176
4V, 16 ppm, 600 dpi, 33MHz RISC	$1,899
5Si, 24 ppm, 600 dpi, 40MHz RISC	$2,529
5SiNx, 24 ppm, 600 dpi, 40MHz RISC, NIC	$2,777
Color 5, 10/3, ppm, black/color, 1200 dpi	$3,977
Color 5M, 10/3 ppm, 1200 dpi, PostScript, NIC	$4,998

INTERNET/WORLD WIDE WEB SETUP AND CONSULTATION

Consulting services on:

- Internet Service Provider Selection
- Hardware/Software Selection
- Security Firewall Design/Setup
- WWW Server/Email/FTP Setup
- WWW Home Page Design
- ISDN/Frame Relay/T 1 Setup

ciscopro™ Authorized Dealer · Microsoft Windows NT Compatible · iiyama · SAMPO · IBM VAR Reseller · COMPAQ Authorized Dealer & Service Center · Twinhead · HEWLETT PACKARD VAR Reseller · Novell Gold Authorized Reseller

650-363-0293
Fax 650.363.0281
Email: sales@netistech.com
WWW Page: *http://www.netistech.com*
705 Veterans Blvd., Suite 1, Redwood City, CA 94063
Business Hours (PST): 8:30am-6:00pm (Mon-Fri)
10:00am-4:00pm (Sat)

NETiS Technology, Inc.
One stop shopping for your computing needs
Since 1989

408-263-0368
Fax 408.263.4624
Email: sales@netistech.com
WWW Page: *http://www.netistech.com*
1606 Centre Pointe Drive Milpitas, CA 95035
Business Hours (PST): 8:30am-6:00pm (Mon-Fri)

Prices, Terms, Specifications, & Availability subject to change without notice. Not responsible for typographical errors. Prices reflect Cash discount. 48- Hours system burn-in. Registered Trademarks are Trademarks of their respective

NETiS Technology, Inc. 408-263-0368 650-363-0293 Email: sales@netistech.com WWW Page: http://www.netistech.com

DSL:

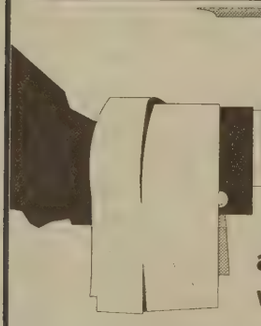
Fast Internet
Low Fixed Price

- Thousands less than T1
- No per minute charges
- 53 times faster than a 28.8Kbps modem

DSL has arrived in the Bay Area!

Don't look to T1 at thousands of dollars per month or ISDN with per minute fees for your high speed Internet connection needs. DSL (Digital Subscriber Line) service has now reached the Bay Area. DSL is a proven technology which allows high speed data transfer over standard phone lines. And at $55 flat rate per month for 144Kbps service it's the best deal on high speed connections available. DSL is available in speeds up to 1.5Mbps -- that's over 10 times faster than 2B ISDN! Call Verio today for more information.

Verio serves up DSL in 2 ways:



DSL a la carte: packages start from $55/month
A la carte is designed for telecommuters or small offices, and includes an e-mail address with your Internet access.

DSL Suite: packages start from $155/month
Suites include a domain name (mail@yourcompany.com), extra IP addresses and multiple e-mail boxes, so many people in one office can share the account.

Call now for more information!

VERIO
NORTHERN CALIFORNIA

http://ncal.verio.net
1-800-591-0990
ncal-sales@verio.com

Technical & User Groups Network *http://www.tugnet.org* 24-hour bulletin board, meeting calendar, membership info., articles, reviews. [Exp. #179.]

W.E.B. DuBois Institute *http://web-dubois.fas.harvard.edu* [Exp. #179.]

Warchild *http://www.warchild.org* Works to alleviate the suffering of children by bringing material aid into war zones. [Exp. #180.]

World Education Access *http://www.wea.net/* Non-profit organization offering scholarship opportunities for students in the US and around the world. [Exp. #179.]

Publications

Bad Subjects *http://eserver.org/bs/default.html* Semi-academic zine. [Exp. #180.]

Bayani Magazine *http://primaveradesign.com/bayani.html* An online magazine of Filipino arts and culture. [Exp. #180.]

Blithe House Quarterly *http://www.blithe.com/* BHQ features a diversity of new short stories by emerging and established gay, lesbian, and bisexual authors. [Exp. #180.]

The Daily Star On-Line *http://dailystar.com.lb* Lebanese newspaper in English. [Exp. #179.]

Car Secrets *http://www.igs.net/carsecrets/info12.htm* An auto consumer's and owner's book for sale online with hundreds of cost saving tips. [Exp. #181.]

Classified Ad Collectible Photo Guide *http://www.nwgraphics.com/collectables* [Exp. #179.]

Global Phone Book *http://www.PhoneNumbers.net* Offers a unique collection of phone, fax, and email directories—worldwide. [Exp. #181.]

International Stock Newsletter *http://members.aol.com/mysteryco/internation al_stock_newsletter.htm* Undiscovered international stock investments with large potential. Objective financial information on innovative global companies. [Exp. #180.]

MediaCulture Review *http://www.mediademocracy.org/MediaCultureReview* [Exp. #179.]

ModemHelp.com *http://www.modemhelp.com* ModemHelp is an infocenter type resource which offers a complete guide to modem- related information on the Web. [Exp. #181.]

Mollie Katzen: Cookbooks, Recipes For Vegetarians *http://www.molliekatzen.com* [Exp. #179.]

Netnoir *http://www.netnoir.com* [Exp. #179.]

Opamp Technical Books *http://www.opamp.com* Table of contents search. Computer, engineering, business, trade books. Over 20,000 titles. [Exp. #179.]

Saving Money Using The Internet *http://www.nwgraphics.com/internet* This is a booklet to show you how to save money on the Net. [Exp. #179.]

U-Turn Monograph And E-zine *http://www.uturn.org/* An art journal. [Exp. #181.]

Odds & Ends

All About Pianos *http://www.tiac.net/users/pianos/index.htm* Everything you ever wanted to know about the piano! [Exp. #179.]

American Needlepoint Art & Design Inc. *http://www.americanneedlepoint.com/* This site is dedicated to needlepoint, custom canvases, and accessories. [Exp. #181.]

Awareness Holistic Books And Information Center *http://www.jps.net/aware* Holistic health, books, info, gifts, and classes in San Mateo. [Exp. #179.]

Body Sculpture *http://www.geocities.com/eureka/8158/spectrum.html* Unique, all-natural slimming lotion designed to eliminate "love handles" and "thunder thighs." [Exp. #180.]

California Electric And Magnetic Fields Program *http://www.dnai.com/~emf* EMF news, reference sources, and a complete program description. [Exp. #179.]

Eyegive *http://www.eyegive.com* The eyegive service offers individuals a simple, free opportunity to transform the way they support their favorite causes or charities into a daily, almost instantaneous activity. [Exp. #180.]

Garden Escape *http://www.garden.com* Seasonal scentsations. [Exp. #180.]

Knowledge Circles *http://www.highvib.org/knowcirc.htm* Tune in the spiritual communities of the Aquarian Age. [Exp. #181.]

PETA *http://www.jesus-online.com* Hoping to make Christians the latest converts to vegetarianism. [Exp. #181.]

Trinity Web Sites *http://surf.to/trinity* Links to Christian Web sites, categorized for your convenience. [Exp. #180.]

Personal Home Pages

Best Freebies *http://www.BestFreebies.com* Features links to over 30,000 sites offering free things—compiled by a disabled vet. [Exp. #179.]

Felice Marra Web Site *http://www.tempolibero.com/malfer/* Agenda Internet: Screen saver collection–Italian style. [Exp. #179.]

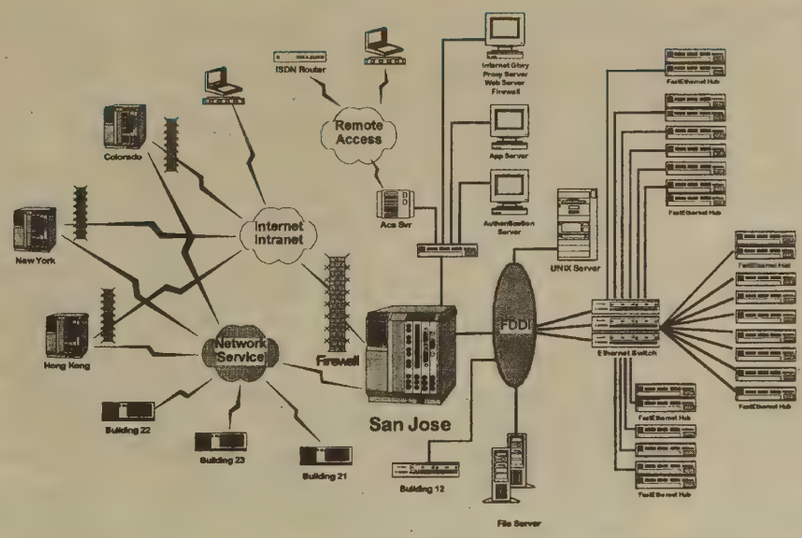
Gadfly2's Home Page *http://www.hooked.net/~gadfly2/* [Exp. #181.]

GPF Avoidance *http://www.geocities.com/Athens/Aegean/4841/* Century cable gripes, Carl Sagan, Hodgkin's disease, hyperlinks, and more. [Exp. #181.]

YOUR TOTAL SOLUTION PROVIDER
NETWORK ASSOCIATES CORPORATION SINCE 1987

Novell Authorized Service Center

Microsoft SOLUTION PROVIDER



Free Needs Analysis

Migration Specialist From Novell to NT

Novell • UNIX • NFS • TCP/IP • Mac • Windows NT
Switch Router Server • PC • JukeBox Printer
Internet Gateway • Remote Access • Modem Pool
ISDN • Frame Relay • T1 • SMDS • ATM • FDDI
FireWall Database • GroupWare Security

3Com IBM Cisco Systems Hewlett Packard Novell Compaq

Authorized Service Center
System Design • Installation • Training • Maintenance
Application Development

Bay Networks Ascend IBM Novell Compaq Tektronix Hewlett Packard US Robotics digital 3Com Cisco Systems NEC

Enterprise Backup Solution
Cheyenne - Backup -ARCserve

Delivers leading edge backup, restore and disaster recovery. With end-to-end data compression and encryption, automatic media management, built-in data migration and virus scanning, and powerful options.

ARCserve for Win NT Server $419
ARCserve for Win NT Enterprise $839
ARCserve for Netware Server $419
ARCserve Disaster Recovery Options.....CALL
ARCserve RAID Options .....CALL
ARCserve Tape Library Option .....CALL

Enterprise Virus Protection
Cheyenne - AntiVirus -InocuLAN

Designed to protect enterprises from viruses. InocuLAN utilized integrity checking and signature scanning to identify all types of viruses, including boot sector, file infector, multipartite and macro viruses. InocuLAN is certified by the National Computer Security Association to detect 100% of viruses "in the wild."

InocuLAN for Win NT Single Server $589
InocuLAN for Netware Single Server $589

intel Express 10/100 Scalable Switch
24-Port
10/100SW
Configuration
for full or
half duplex
$2469

intel Express 10 Switch 24 Port
Network performance
Adaptive Technology
for maximum
performance
Built-in 100BTX
connectivity
$1835

intel Express Router 9100
1 LAN port & up to 2 WAN ports
IP/IPX/PPP/PAP/CHAP
Supports Frame Relay,
X25, PPP, LAPB, Leased
Line (TI/EI)
Internet VPN Support
$843

intel Express 10/100 Stackable Hubs
2 expansion slots
Allows 10 and
100Mbps operation
in a single, managed
stack
24-Port
$1189

Cisco Systems Switch 2916 Ethernet Backbone
10/100 Switch
16 Port
$3096

Cisco Systems Catalyst Switch 2820
24-10SW w/1-AUI
Expansion Slot for
100baseT: FDDI and DC3
ATM Ports
2048 MAC Address
$1487

NETWORK ASSOCIATES CORPORATION

VISIT OUR WEB SITE: WWW.NAC.COM
SUNNYVALE: 408-733-2600 • FREMONT: 510-249-2100
FAX: 510-249-2121 • e-mail: sales@nac.com

Grandmother's Attic *http://www.wizard.com/~dancer/* Devoted primarily to Greyhounds and the adoption of the ex-racing Greyhound. [Exp. #179.]

Khilafah/Caliphate Is The Way To Islam *http://home.att.net/~kgmowla* 1300 years old Khillafah/Caliphate is the only political system in Islam and it must be re-established without further delay. [Exp. #181.]

Kittys On Flame With Rock And Roll *http://www.kittyfeet.com* Frisco art, rock music, QuickTime, fiction, and more. [Exp. #181.]

Lambrechtsen Online *http://www.knoware.nl/users/evim/index.html* History of a Dutch family, listing of all Dutch archives. [Exp. #179.]

Lee's Home Page *http://www.twow.com/leeg/* An eclectic site with a surfing theme. Links to surfing, surf conditions, weather, law, software, scuba diving, and Web resources. [Exp. #180.]

OmniGo Online *http://www.bayside.net/users/todo/ogo/* A user site for the HP OmniGo 100/120 community. [Exp. #179.]

Robotman *http://www.therobotman.com* Educational and fun site. [Exp. #181.]

Travel In Indonesia *http://www.TroyDrake.com* Photos of travel in Indonesia. [Exp. #179.]

Government/ Politics

African-American Astronauts Recognized *http://observe.ivv.nasa.gov/nasa/ootw/1998/ootw_980211/ob980211.html* NASA's Observatorium honors the astronauts during Black History Month. [Exp. #179.]

Berkeley Citizens Action *http://www.jps.net/bca* The municipal electoral coalition that has organized Berkeley progressive politics for the last two decades. [Exp. #180.]

Bureau Economique en France *http://www.cotedivoire.co* Site officiel du Bureau Economique: Paris and Washington. [Exp. #179.]

California Trade And Commerce Agency, Division Of Tourism *http://gocalif.ca.gov* [Exp. #180.]

City of Citrus Heights, CA *http://www.ci.citrus-heights.ca.us* [Exp. #179.]

Democracy Direct *http://www.marinternet.com/rknox/car15.html* Reclaiming democratic representative government by giving the national and state electorates a meaningful and direct voice (not the last word) in state and national government. [Exp. #181.]

Library Of Congress Information Bulletin *http://www.loc.gov/loc/lcib* [Exp. #179.]

May Day On the Web 1998 *http://www.accessweb.com/mayday/* Workers fight for human rights. [Exp. #181.]

Mumia Abu-Jamal Web Site *http://www.mumia.org* Learn more about Mumia Abu-Jamal, read the latest updates on his case. [Exp. #179.]

Nuclear Age Peace Foundation *http://www.wagingpeace.org/* Home of Abolition 2000. [Exp. #180.]

Political Ecology Group *http://www.igc.org/peg* PEG is a multi-racial, volunteer-based organization working for environmental justice in the SF Bay Area. [Exp. #179.]

San Diego County Democratic Party *http://www.netgaincc.com/sddemocrats/* [Exp. #179.]

US Consumer Information *http://www.pueblo.gsa.gov* Find the latest information from more than forty US government agencies. [Exp. #179.]

Arts

American Photographer In Spain *http://www.geocities.com/Soho/Gallery/5718/feria.html* Images of The Spring Fair (La Feria) in Spain! [Exp. #181.]

ArtsLink Australia *http://www.artslink.org.au/* Professional performing and entertainment site. [Exp. #181.]

Filipino American Exposition *http://primaveradesign.com/faae.html* Shows this year's schedule of festival and other events. [Exp. #180.]

One Art World *http://www.oneartworld.com* A free Web-based art gallery exhibiting artworks by contemporary, distinguishing artists. [Exp. #181.]

PaintingsDirect.com *http://www.paintingsdirect.com/* A new way to find and buy paintings. [Exp. #181.]

Peter Findlay Gallery *http://www.findlay.com/* Art gallery. [Exp. #181.]

PhotoSphere Images *http://www.photosphere.com* PhotoSphere offers professional, royalty-free stock images, on CD-ROM and as downloadable single images. [Exp. #179.]

Entertainment/ Leisure

Acura Club *http://www.acuraclub.com* [Exp. #179.]

AddictMUD *http://www.addict.dmswebworks.com* This is the official home page of AddictMUD. A great place for new and experienced mudders alike! [Exp. #179.]

The Adrian Empire *http://192.41.53.160/* A medieval re-creation group, featuring live steel combat. Attain Knighthood in three disciplines. [Exp. #180.]

Alex Fox, Flamenco Guitarist *http://www.alexfox.com/* Alex Fox has created his own unique style of music, combining classical guitar, flamenco, and pop. [Exp. #181.]

Bimbo Toolshed Web Site *http://jackattack.com/bimbotoolshed* Cyberhome for San Francisco's greatest punk band. [Exp. #179.]

The Blarney Stone *http://members.tripod.com/~iwolff/index-2.html* Award-winning Irish Humorist offers samples of his columns, parodies, essays, and other laugh out loud observations. [Exp. #181.]

Bogota Colombia *http://www.bogotacolombia.com/* Todo sobre la capital de Colombia—The city, the enterprises, and the people of Bogota. [Exp. #181.]

Cashmere Heights Weddings *http://www.chcweddings.co.nz* New Zealand's most exclusive wedding and honeymoon company. [Exp. #180.]

Classical Music For Novices *http://www.angelfire.com/pa/noviceclassical* [Exp. #179.]

Cypher *http://www.epgmedia.com/cypher* [Exp. #179.]

Dee Zaster, Esq. *http://members.tripod.com/~russmccor/* Guess who just entered the race for Governor of California? Don't miss DZ's campaign to drive Pete Wilson crazy and out of office. [Exp. #180.]

Dial-A-Joke *http://www.howdyneighbor.com/batteryman/ra.htm* The old recordings are back and on the Internet. Stuff recorded up to 20 years ago. [Exp. #181.]

Elvis In Concert *http://www.wydeo.ch/~ma_wyss/index4.htm/* [Exp. #179.]

Explore Africa *http://www.exploreafrica.co.za* An umbrella Web site about Southern Africa. [Exp. #179.]

Explore Nova Scotia *http://explorens.rivendell.ns.ca/* One-stop guide to exploring the Province of Nova Scotia, Canada. What to see, how to get there, where to stay, and things to do! [Exp. #180.]

Find A Joke *http://www.find-a-joke.com* A large collection of all kinds of jokes and other humor. [Exp. #181.]

Great American Duck Races *http://www.duckrace.com* The event involves racing rubber ducks down a local waterway. [Exp. #179.]

Hillbilly Hoedown *http://www.hillbillyhoedown.com/* The happiest show In the Smokies. [Exp. #181.]

Humor Monthly (Or Thereabouts) *http://www.masterm.com/humor.html* Monthly humor on relationships, computers, famous quotes, name changes, religion, and interesting facts. [Exp. #179.]

KROQ 106.7 *http://www.cosmoslink.net/~kroq* This award-winning page is on "the world-famous KROQ 106.7 FM." Lists of DJs, events, and much more. [Exp. #180.]

Love Psychic Ariele *http://www.ariele.com/* 1-888-289-2681 Clairvoyant, phone readings, and love magic. [Exp. #181.]

Mark L. Falconer Film Page *http://members.aol.com/MFalc1/home.html* Reviews of currently released films and videos. Occasional commentary on the industry. [Exp. #180.]

Mercury *http://www.sleepinggiantstudios.com/mercury* Web site for the band Mercury. [Exp. #179.]

Proline Fishing Products *http://www.prolinefishing.com* Bass fishing lures. Fresh water, custom quality, for novice and professional anglers. [Exp. #181.]

Res Rocket *http://www.resrocket.com* Live interactive music jamming on the Internet. [Exp. #179.]

Rosewood Music Publishing & Sales *http://www.rosewoodmusic.com* We publish and promote independent music artists and writers. [Exp. #179.]

San Francisco Brewed *http://members.xoom.com/sfbrewed* The finest unsigned and indie bands of the Bay Area! We're also RealAudio-enhanced! [Exp. #181.]

Star Trek Universe *http://www.uss-1701-e.com/* Covering all four shows with features that include a gallery, gossip, news, and more. [Exp. #181.]

SteppinStone Entertainment *http://www.steppinstone.com/* An independent film and TV company. [Exp. #179.]

Telery *http://www.telery.com/* A place to chat, play games, and have fun with your friends! Live chat, a casino, online games, free email and homepages! [Exp. #181.]

TexasCasino.com *http://www.TexasCasino.com* Experience the finest regulated online casino and sportsbook licensed to International Gaming Network (IGN). [Exp. #179.]

Total Conversions *http://www.totalconversions.com/* Total conversions for all games like Duke Nukem 3D, Shadow Warrior, Blood, Quake, Quake 2, and many more. [Exp. #180.]

Travel With A Cause *http://www.miramed.com/* Travel in Russia, China, and Nepal. [Exp. #181.]

Underworld Software *http://www.uwgames.com/* Try a free demo of BloodBath and you could win $500! [Exp. #180.]

Unsound Records Home Page *http://www.unsound.com.au/index.html* New and used CDs, 12" vinyl/ Soul, reggae, hip-hop, oz, and soundtracks. [Exp. #179.]

Virtual Zone *http://www.mnet.fr/virtualz* Astuces, cheats, pour Playstation, Saturn, N64, PC. [Exp. #180.]

What's Cookin' With Chef Ron *http://www.chefron.com* Catering to the food industry and listeners around the country, includes the latest on outdoor news and tips. [Exp. #179.]

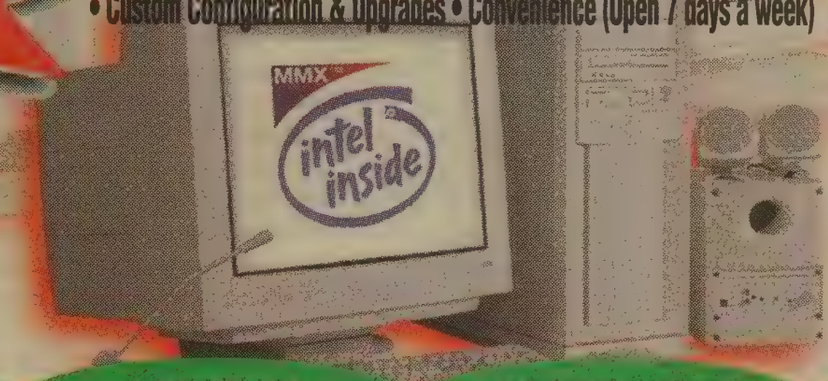
CompuMart

OPEN 7 DAYS A WEEK
- Fast Repairs & Upgrades
- Complete Technical Services
- Personal Attention & Follow-up
- On-site Service Available for Home or Business
- Complete Networking Services

SINCE 1990 WE'VE BEEN OFFERING YOU:

- Knowledgeable Personal Service (Expert Technical Staff)
- On-Site Services • Complete Networking Services
- Custom Configuration & Upgrades • Convenience (Open 7 days a week)

OVER 5000 PRODUCTS IN STOCK
Including: Software, Internet, Networking, CD-ROM, Printers, Monitors, Computer Books, and Magazines



VALUE

- Pentium® MMX CPU Motherboard
- 32MB 60ns EDO RAM
- 3GB Hard Disk ❖ 1.44MB Floppy Drive
- 2MB Video w/MPEG
- 15" .28 NI Monitor
- 104 Enhanced Keyboard ❖ Mouse
- MS Windows 95 ❖ 32X CD-ROM
- Sound Blaster 16 ❖ Amplified Speakers

MULTIMEDIA

- Pentium® MMX CPU Motherboard
- 64MB 60ns EDO RAM
- 4.0GB Hard Disk ❖ 1.44MB Floppy Drive
- 4MB VRAM Video ❖ 15" .28 NI Monitor
- 104 Enhanced Keyboard ❖ Mouse
- MS Windows 95 ❖ 32X CD-ROM
- Sound Blaster 16 ❖ Amplified Speakers
- 56K Fax/Modem

PERFORMANCE

- Pentium® II CPU & Motherboard
- 64MB EDO RAM ❖ 4.0GB SCSI Hard Drive
- 1.44MB Floppy Drive ❖ 17" .28 NI Monitor
- 8MB AGP Video Card
- 104 Enhanced Keyboard ❖ Mouse
- 32X SCSI CD-ROM
- Sound Blaster AWE 64
- Adaptec 2940 UW Ctrl ❖ 56K Fax/Modem

PROFESSIONAL

- Pentium® II CPU & Motherboard
- 64MB EDO RAM ❖ 4.0GB SCSI Hard Drive
- 1.44MB Floppy Drive ❖ 17" .28 NI Monitor
- 8MB AGP Video Card
- 104 Enhanced Keyboard ❖ Mouse
- 32X SCSI CD-ROM
- Sound Blaster AWE 64
- Adaptec 2940 UW Ctrl ❖ 56K Fax/Modem

Pentium® MMX 166/200 . . $945/999 Pentium® MMX 200/233 . $1149/1249 Pentium® 266/300/333 . . $1895/2095/2195 Pentium® II 350/400 . . . . $2195/2295

STORAGE

WD	2.0GB/2.5GB	$149/159
	3.1GB/4GB	179/189
	5GB/6GB	209/229
Quantum	2.1GB/3.2GB SCSI	189/249
	4.2GB SCSI	289
	3.2GB/6.4GB ULTRA IDE	199/229
IBM	2.0GB/4GB SCSI/UW	229/269
Fujitsu	4GB SCSI/UW	299/339
	1.2GB/1.7GB IDE	129/139
	2.1GB/3.5GB IDE	159/209
Seagate	9GB SCSI/UW	799
Iomega	Zip 100 IDE	89
	Jaz 1.0GB Int/Ext	249/289
	Jaz 2GB Int/Ext	479/579
Colorado	5GB Tape Int/Ext	199/239

CONTROLLERS

Adaptec	1505/1515	$74/89
	1542/2920	179/139
	2940/2940UW	159/189
	Mini SCSI +/PCMCIA SCSI	149/179
Promise	Enh IDE&IO	49

SCANNERS

HP	ScanJet 5100C/6100C	$289/709
	ScanJet 5S	249
Logitech	ScanMan Color 2000	129
	PageScan Color	199
PaperPort	Visionare MX/Strobe	89/139
UMAX	Astra 1200S	239

MONITORS

Hitachi	17" 630/19" 75L	$639/849
Viewsonic	14" E641/15" E655	209/299
	17" E771/17" G771	359/469
	21" G810/21" P815	975/1225
Sony	15" 100ES/100GS	339/395
	17" 200ES/200GS	545/639
NEC	E500/A700	389/595

PRINTERS

HP	670C/720C	$199/299
	890/1000C	399/485
	6Lxi/6Pxi	389/749
	4000/5si	1150/2375
Epson	Stylus Photo/Color 800	429/379
	Stylus 1500	699

VIDEO BOARDS

ATI	Expert-At-Play 4/8MB	$159/209
	All-in-Wonder 4/8MB	169/229
Diamond	Stealth II 4/8MB	89/129
	Fire GL Pro 4/8MB	139/169
Matrox	Millennium II 4MB/8MB	149/219
	Mystique 2MB/4MB	99/139

MULTIMEDIA

Creative Labs	SB 16/64 PnP	$45/79
	Discovery 64 Kit	195
	Value 24X AWE 64	199
Mitsumi/Teac	32X CD-Rom	79
Toshiba	24X/32X CD-Rom IDE	65/79
	16X/32X CD-Rom SCSI	69/109
MicroSolution	Backpack	239
Panasonic	PCMCIA CD-ROM	269
NEC	24X CD-ROM SCSI	85

FAX/MODEMS

Zoom	56K Int/Ext	$99/119
Megahertz	33.6/56K PCMCIA	169/219
Supra	56K Int/Ext	99/109
US Robotics	56K Int/Ext v9.0	145/165
Motorola	56K Int/Ext	99/129

NETWORKING

- Windows NT, Novell & UNIX Platform Support
- Network Design & Integration
- Complete Installation
- Hardware On-site Services
- Internet Servers

Bay Networks · intel · ASCEND · 3Com · Cisco Systems

NETWORK PRODUCTS

CNet	NE2000	$21
3COM	3C509TPO/BNC	55/89
	3C509 Combo	89
	3C900/3C905 TP	85/67
	PCMCIA TP	135
INTEL	EtherExpress 10/100	59

NETWORKING SERVICES

NT & NOVELL	Servers & Installation	CALL
	On-Site Service Available	CALL

1320 S. California Blvd., Walnut Creek
(Across from Cost Plus, next to Stroud's)
1 Block South of Simon Home Center

(510) 946-1234

Visit Our Website: compumart-online.com

All prices and availability are subject to change without notice. We are not responsible for typographical errors.

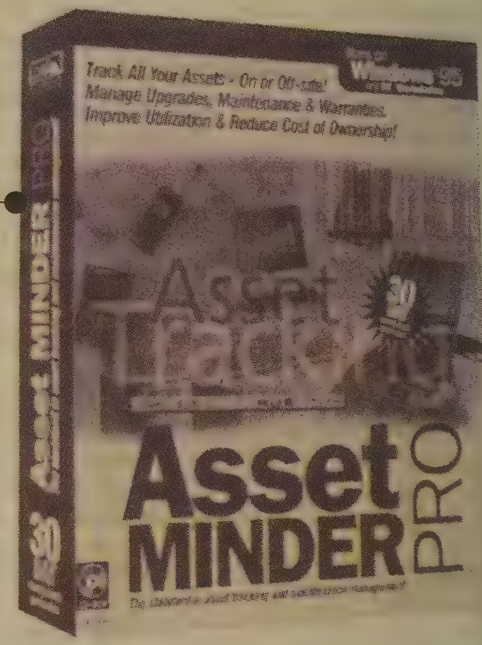
Monday-Friday: 9:30-7:30
Saturday: 10:00-5:00
Sunday: 12:00-5:00

Product Announcements

PC Software

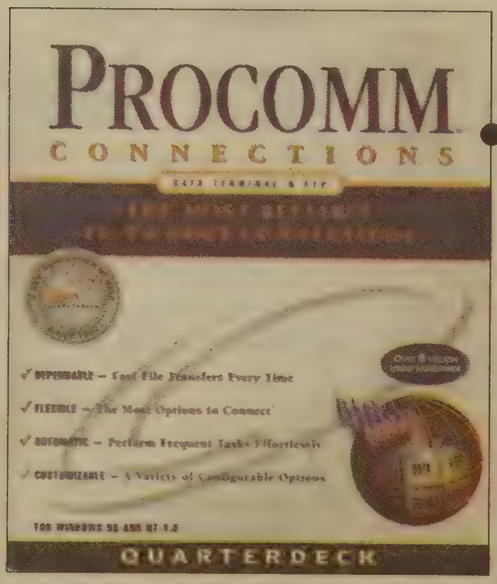
ACT! 4.0 for Windows 95/NT

This fully customizable contact manager extends customer databases with Internet information, delivers superior integration with communication tools, and provides the power users are looking for in a familiar and easy-to-use interface. The new version comes with many ease-of-use improvements such as: The advantage of instant access to the Internet; direct Internet email support and support of Qualcomm's Eudora Pro email; SideACT! which holds to-dos, phone calls, memos, and allows the user to quickly and easily jot down items; LiveUpdate, that enables customers to easily obtain product information, patches and updates, via the Internet or modem (LiveUpdate appears in the help menu and launches a wizard to guide users); a free copy of ACT! 3.0 for Windows 3.1; WinFax PRO; Norton AntiVirus; pcANYWHERE; Connected Online Backup and others. Plus an ACT! PalmPilot link which is included on the CD. ($199.95 and an upgrade price of $89.95) Symantec Corp., 1-800-441-7234. *www.symantec.com* .


Track All Your Assets - On or Off-site!
Manage Upgrades, Maintenance & Warranties
Improve Utilization & Reduce Cost of Ownership!
Asset Tracking
Asset MINDER PRO

Asset Minder Pro

Asset Minder Pro, for Windows 95 and NT, is designed to track enterprise network assets throughout their lifecycle to minimize hardware and software utilization, reduce equipment losses, decrease downtime through regular maintenance, and substantiate insurance claims in the event of a disaster. It integrates Internet connectivity, document imaging, a "location-centric" database, and bar code capabilities into one program to keep track of the specific details of any asset including product specifications, serial numbers, location, date of purchase, contact names, warranties, as well as upgrade and service histories and schedules. Asset lists can be created by department, location, model, vendor or any category you choose. ($399, includes the Administrator and a single-user license. Additional workstation licenses are $199) PC Imageware Corp., Olympic Tower Bldg., 300 Pearl St., Ste. 200, Buffalo, NY 14202. 1-888-462-4362. *www.pci-corp.com* .



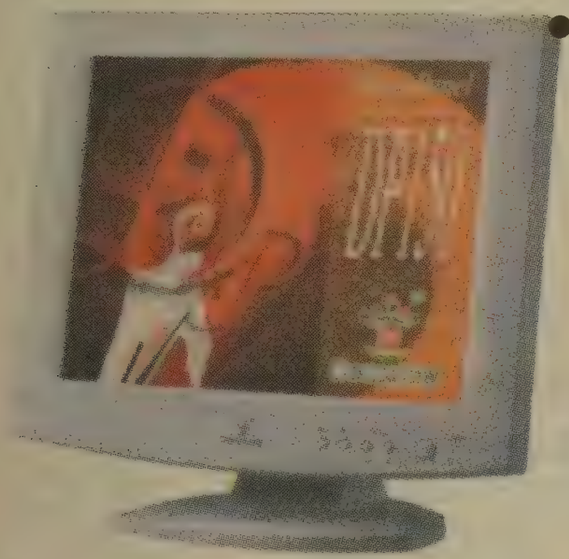
Procomm Connections

Procomm Connections meets the demands of corporate users who only want the core terminal emulation and file transfer technologies that are part of Procomm Plus communications suite. With support for 35 terminal emulations and 11 file transfer protocols, as well as FTP, it streamlines access to mini or mainframe information. TCP/IP support extends to all 35 terminal emulations, making Procomm Connections a versatile, feature-rich Telnet product. The ASPECT scripting language automates frequently performed tasks and connections, and gives the user the power to customize communications. It runs under Windows 95 and NT 4.0. ($119.95; ten-user pack, $1,079 upgrade from any previous version of Procomm Plus, $69.95) Quarterdeck Corp., 13160 Mindanao Way, Marina del Rey, CA 90290. 1-800-683-6696. *www.quarterdeck.com* .

Monitors

Dragon Eye D97A

The Dragon Eye D97A 19" monitor features Advanced Response Rotational Control (ARRC)—two easy to use knobs, one for selecting the function and the other for the actual adjustment. This system provides much finer adjustments than pushing buttons or cycling through a menu of choices. Other features include ultra high resolution (1600 x 1200 with 75Hz refresh rate); 18" viewing area; flat square display; multi-step dynamic focus for sharper, crisper images at all points on the screen; 5-year limited factory warranty; and, optional USB technology, which allows for higher video throughput and can be daisy chained to free up I/O ports. All Dragon Eye monitors are Plug-n-Play, meets MPR II Low Radiation and Energy Star standards, and are Windows and Macintosh compatible. ($??) Sceptre Technologies, Inc., 16800 E. Gale Ave., City of Industry, CA 91745. (626)369-3698. *www.sceptre.com* .

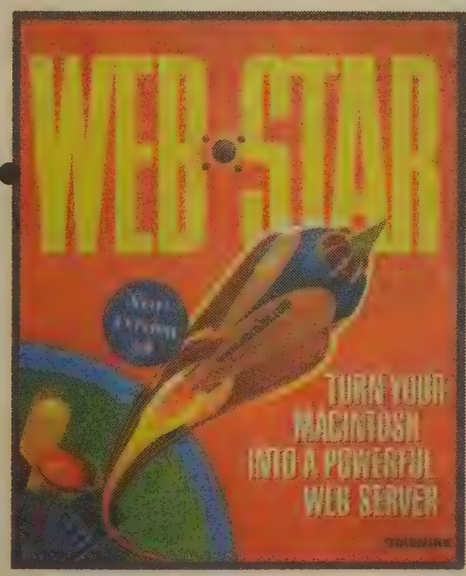


DecaPanel DP150

The DecaPanel DP150 features a 15" TFT type Active Matrix Color panel with 15" diagonal viewable area and anti-glare hard coating. It offers Plug-n-Play compatibility, meets TCO92 and MPR II low radiation emission standards. OSD Controls let you easily adjust brightness, contrast, horizontal/vertical position, size, mode, RGB contrast, phase, and clock. The DecaPanel is PC compatible from VGA up to 1024 x 768 non-interlaced, as well as PowerMac computers. ($??) DecaView Corp., 1236 San Luis Obispo Ave., Hayward, CA 94544. (510)429-8885. *www.decaview.com* .

Macintosh Software

WebSTAR 3.0



This software includes many new features to help you turn your Macintosh into a Webserver. It now includes FTP and Proxy servers that increase security, speed of Internet downloads and block access to unwanted sites. It also has improved search capabilities; IP Multihoming, so that one server can serve multiple Web sites, each on a unique IP address; language-based routing, allowing the server to read the language preference setting in the browser, and serve the content hierarchy created for that language. Another new addition is a revamped Web STAR Administrative interface that has been rewritten and redesigned to be easier to use. It also supports the latest Internet standards including HTTP 1.1 that speeds up the download time to the browser, JavaSoft's Java Servlet API and WebObjects. A special-offer "Bundle Up" program of discount products and the opportunity to purchase Rebound!—the new auto-restart ADB device from Sophisticated Circuits—is also available at half-price. (WebSTAR can be downloaded at *www.starnine.com* . Estimated Street Price, $499; upgrade for 1.x is $299 or 2.x is $199) StarNine Technologies. Inc., (510)649-4949.

Updates

Alcom Corp. announced new Revision 3 for its **LanFax NT 5.0** fax server software for email users seeking to add fax to their desktop communication tools. (Starts at $699; customers who purchased Revision 2 in April 98 qualify for a free upgrade) Alcom Corp., *www.alcom.com* .

Elektroson, Inc. announced the introduction of **GEAR UNIX 3.5**. This CD-Recordable software is available for all major UNIX platforms and is recognized by IBM as officially AIX Ready. ($1,799) Elektroson, Inc. (408)371-4800. *www.elektroson.com* .

Ezenet, Inc. launched **INSTAbase 4.0** that improves and simplifies database needs with added features and **Web-Ready 4.0** that gives Web integration with the ability to publish databases to the Web. (A 30-day trial version is available at *www.instabase.com*)

Farallon, A division of Netopia Inc., unveiled significant price reductions (up to 39%) for their Starlet Switch product line. They are plug-and-play solutions for optimizing Ethernet and Fast Ethernet networks. (Starting at a little over $700) Farallon and Netopia, Inc. (510)814-5000. *www.farallon.com* .

go2net, Inc. launched version 2.0 of **PlaySite** (*www.playsite.com*), a multi-player online games network. The new site features popular word, board and card games, as well as chat lounges, game-related chat areas and instant messaging. (Free) go2net, Inc. *www.go2net.com* .

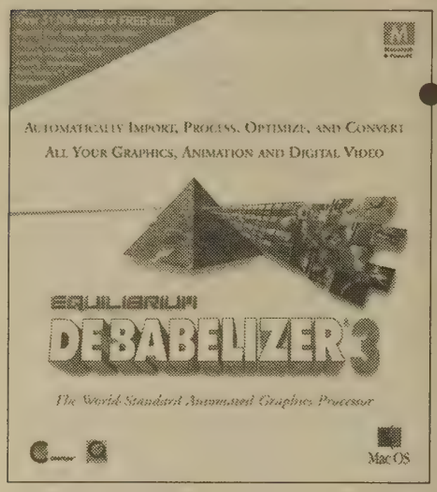
Jasc Software Inc. introduced **Paint Shop Pro 5.0 with Animation Shop**. It has an image animator that helps users quickly create graphic animations, including image and text transactions through advanced wizards. (Free download at *www.jasc.com*) 1-800-622-2793.

Lightspeed Software introduced **WebConvert 2.0**, a conversion tool for placing legacy documents on either your internal or external Web site with a dynamically linked table of contents and style sheets. ($295) Lightspeed Software, (805)324-4291. *www.lightspeedsoftware.com* .

Planet Corp. released its new version of **Business Maestro**, a software for budget planning and financial management. (Desktop, $995; enterprise, $2495) Planet Corp., 1-800-366-5111. *www.planet-corp.com* .

Puma Technology, Inc. unveiled **Intellisync For Windows CE 2.0**, which provides users of the Handheld PCs and Palm PCs, with new features and support for personal information management. ($69.95) Puma Technology, Inc., (408)321-7650. *www.pumatech.com* .

RadView Software announced that it has enhanced its Web performance testing tool, **WebLoad 2.2**, to support more aspects of e-commerce application environments. (Prices vary—for example, 1000 simulated users is $20,000) RadView Software, 1-888-RADVWEB. *www.radview.com* .


Automatically Import, Process, Optimize, and Convert
All Your Graphics, Animation and Digital Video
EQUILIBRIUM
DEBABELIZER 3
The World Standard Automated Graphics Processor
Mac OS

Macintosh Software (cont.)

DeBabelizer 3

DeBabelizer 3's intuitive interface and extensive toolset enable you to optimize, process, and convert large numbers of files automatically. It also enables you to process to Web-ready formats, including animated GIF and QuickTime 3.0, and supports most Photoshop and third-party plug-ins. With DeBabelizer 3's new CMYK and Apple ColorSync support, you can process images from any source for delivery on CD-ROM and the Web. New features include streamlined batch automation functions, interactive previewing, extensive drag-and-drop capabilities, new built-in filters, enhanced plug-in filter support, and more. (Estimated Street Price, $399.95; upgrade from DeBabelizer Toolbox, $149.95) Equilibrium, Inc., Three Harbor Dr., Ste. 111, Sausalito, CA 94965. (415)332-4343. *www.equilibrium.com* .

PC Hardware

Stallion BX

The Stallion BX motherboard is a pair of high-performance Slot I Pentium II system boards that allow Intel's new CPU and chipset to run at clock speeds up to 450MHz. The boards are available in both an ATX (SY-6BA) for factor for desktop workstations and entry-level servers, and an AT (SY-6BB) footprint for low-cost, high-performance systems. It offers performance advantages for OEMs, VARs, and system integrators building desktop workstations, as well as providing a cost-effective upgrade for end users seeking a performance boost for 3D applications, Web graphics, and gaming. Standard features on both boards include Intel's new 440BX chipset, fast synchronous DRAM, Wake-On LAN, and the Ultra Direct Memory Access 33MBps (Ultra DMA/330 hard drive interface. Both boards also feature Sofset jumperless technology, which allows the CPU clock speed to be set incrementally with Award Software's Plug-n-Play BIOS. (SY-6BA, $200; SY-6BB, $180) M Technology, Inc., 1931 Hartog Dr., San Jose, CA 95131. (408)441-8818. *www.mtiusa.com* .

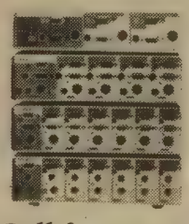
continued on page 160

Control Multiple PCs With One Keyboard Mouse and Monitor!

EDIMAX'S CPU SWITCHES

- Save money on redundant peripherals
- Save precious space by eliminating extra keyboards, monitors & mice
- Control 2, 4 or 6 PCs
- Uses standard cables
- Supports AT or PS/2
- Supports VGA, SVGA & XVGA
- Control by push-button, keyboard, hot keys, or auto scan
- Truly plug-and-play
- Intelligent keyboard & mouse emulation to ensure successful PC boot up

EDIMAX
1-800-652-6776
Tel: 408-496-1105
Fax: 408-980-1530
http://www.edimax.com

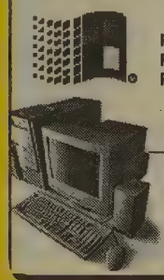
Ordering Information	Item #	Description	List(MSRP)
	CAS221	2-Port PS/2 & AT	$159
	CAS421	4-Port PS/2 & AT	$239
	CAS601	6-Port AT	$305
	CAS611	6-Port PS/2	$305
	6-Foot Cable Kit		$20
	10-Foot Cable Kit		$30

Call for special corporate and reseller discount program!

• COMPLETE & EXCELLENT SERVICE • LOWEST PRICES

TXPRO POWER SYSTEM

- TXPro Motherboard w/512K PLBC
- Support USB & U-DMA w/ IO (16550)
- Integrated 64-Bit SVGA & 16-Bit Sound
- 32MB 72-Pin EDO Ram • CPU Fan
- 2.1GB U-DMA HD • 1.44MB FD
- 3 Button Mouse • 104 Keyboard
- 24X CD-Rom • 80W Amp. Speakers
- Mini Tower w/ 230W Power Supply
- Monitor Not Included



intel.
P166MMX.....$440
P200MMX.....455
P233MMX.....485

AMD
K6-200.....$435
K6-233.....445
K6-266.....550

Cyrix
M2-P200+.....$420
M2-P233+.....445

"HOME" MULTIMEDIA INTERNET SYSTEM

- INTEL® 430TX Chipset w/512K PLBC
- Support U-DMA & USB w/ IO (16550)
- Mini Tower Case w/ 230 Watt PS
- **32MB (4X64) SDRAM** • CPU Fan
- Samsung 3.2GB Utra-DMA IDE HD
- Trident 9685 Chip, TVOUT, PCI w/ 2M
- Rockwell 33.6K w/Voice • 1.44MB FD
- 3 Button Mouse • Mitsumi 104 KB
- 24X CDRom • 16Bit Sound • 80W SPK
- **Win95 (OSR 2.5)** • Internet Explore 4.0

intel.
P-166MMX.....610
P-200MMX.....615
P-233MMX.....645

AMD
K6-200.....590
K6-233.....610
K6-266.....695
K6-300.....790

Cyrix
M2-P200.....$575
M2-P233.....590
M2-P266.....675

"PRO" MULTIMEDIA INTERNET SYSTEM

- Tyan Turbo II 430TX w/512K PLBC
- PCI EIDE Utra-DMA w/IO (16550)
- Mini Tower Case w/ 230 Watt PS
- **32MB (4X64) SDRAM** • CPU Fan
- Maxtor 4.3GB U-DMA Hard Drive
- Diamond Steath 3D 2000 Pro w/ 4M
- Rockwell 56K Flex Int. w/ Voice
- Microsoft Mouse • Mitsumi 104 KB
- Yamaha 16-Bit 3D Sound • 1.44 FD
- 24X CD-Rom • 80W Amp. Speakers
- **Win95 (OSR 2.5)** • Internet Explore 4.0

AMD K6 3D PROCESSOR
K6-200.....710
K6-233.....725
K6-266.....845
K6-300.....940

intel.
P166MMX.....$725
P200MMX.....745
P233MMX.....765

Also Available in ATX Form

"LEX" PII MUTIMEDIA INTERNET SYSTEM

- Pentium® II 440LX AGP Motherboard
- ATX Mid Tower Case w/ 235W PS
- **32 MB (4X64) SDRAM** • CPU Fan
- Maxtor 4.3GB Utra-DMA IDE HD
- Diamond Steath 3D 4000 4M AGP
- Rockwell 56K Flex Int. F/M w/Voice
- PS2 Net Mouse • Mitsumi PS2 KB
- Yamaha 16-Bit 3D Sound • 1.44 FD
- 80W Amp. SPK • 24X CD-Rom
- **Win95 (OSR 2.5)** • Internet Explore 4.0

Pentium® II 233.....$880
Pentium® II 266.....930
Pentium® II 300.....1045
Pentium® II 333.....1175
Pentium® II 350(440BX).....1325
Penium® II 400(440BX).....1565

PRO 2000 SERIES

- INTEL® ATLANTA 440LX AGPset
- ATX Mid Tower Case w/ 235W PS
- **32MB (4X64) SDRAM** • CPU Fan
- Maxtor 6.4GB U-DMA IDE HD
- Diamond Viper V330 4M AGP
- Supra Max V.90 PCI Voice Int. F/M
- MS PS2 Mouse • Keytronic PS2 KB
- Yamaha OPL3-SA Sound • 1.44 FD
- Hercules 300W SPK • 32X CDRom
- **Win95 (OSR 2.5)** • Internet Explore 4.0

Pentium® II 233.....$1045
Pentium® II 266.....1095
Pentium® II 300.....1220
Pentium® II 333.....1355
P II 350 (Seattle 440BX).....1535
P II 400 (Seattle 440BX).....1765

ALL COMPLETE SYSTEMS CARRY 1-YEAR PART & LIFETIME LABOR WARRANTY

SPECIAL
Mitsumi CD-Writer 2X8 IDE
Adaptec Easy CD Creater
Adaptec Direct CD
$295

MMX UPGRADE KIT

- TXPro Motherboard w/512K PLBC
- Support USB, PS2 Mouse & Utra-DMA
- Intergrated 16-Bit Sound • 32MB EDO Ram
- Trident 9685 PCI w/2MB Exp. to 4MB
- ONE YEAR WARRANTY

AMD K6-200.....$215
AMD K6-233.....225
AMD K6-266.....310
Pentium® 166MMX.....235
Pentium® 200MMX.....245
Pentium® 233MMX.....270

SPECIAL
TXPro Motherboard 512K U-DMA MMX
Integrated 64-Bit SVGA & 16-Bit Sound
$70

PII UPGRADE KIT

- P2 Mainboard, Intel® 440LX/BX AGP
- ATX Mid Tower Case w/ 235W PS
- Diamond Stealth 4000, AGP, 4M
- 32MB SDRAM • CPU Cooling Fan
- ONE YEAR WARRANTY

Pentium® II 233.....$475
Pentium® II 266.....520
Pentium® II 300.....645
Pentium® II 333.....785
Pentium® II 350.....940
Pentium® II 400.....1165

MOTHERBOARDS

- TXPro, 512K, U-DMA, MMX.....$55
- TXPro, 512K, U-DMA, MMX w/ Sound.....60
- **SIS 1M Cache, U-DMA, AGP w/ Sound..75**
- Intel® 430TX, 512K, MMX w/Sound.....67
- Intel® 440LX,PII,AGP,ATX.....95
- A-TREND PII 440LX, AGP, ATX.....105
- **A-TREND PII 440BX, AGP, ATX.....150**

ASUS
- SP97-V, 512K w/64-Bit SVGA.....$78
- **TXP4, U-DMA, 512K.....105**
- TXP4-X, U-DMA, 512K ATX.....110
- P-II LX97 440LX AGP ATX.....135
- P-II LX97-S AGP w/SCSI ATX.....225
- P-II LX97D AGP Dual w/SCSI ATX.....270

IWAN
- Tomcat VI 430TX Dual, AT.....$165
- Titan Turbo II 430TX, AT.....95
- **Titan Turbo II 430TX, ATX.....97**
- Tiger PII 440LX, AGP, ATX.....135
- Tiger PII 440LX, AGP, Dual.....235
- Thunder II 440LX, AGP, Dual, ATX w/ 3940UW SCSI.....380
- TSUNAMI 440BX, AGP,ATX.....185

ABIT
- PX5, 430TX, 512K, AT.....$75
- AX5, 430TX, 512K, ATX.....90
- LX6, P-II, 440LX, ATX.....125
- BX6, PII, 440BX, ATX.....165

intel.
- Anchorage, 430TX, ATX w/Sound.....$110
- Atlanta P-II, 440LX, ATX.....155
- Atlanta P-II, 440LX w/Sound.....158
- Dakota Dual P-II, 440LX, ATX.....495
- **Seattle PII, 440BX w/ Sound.....235**

FAX & MODEMS

- Rockwell 33.6 w/ Voice.....$40
- Rockwell 56K w/ Voice.....60
- Supra Express 33.6 w/Voice.....55
- Supra Max 56K V.90 PCI w/ Voice.....65

U.S. Robotics
- USR 56K w/o Voice.....89
- USR 56K w/ Voice.....95
- **USR 56K V.90 w/Voice.....119**

CPUs

- Pentium® 166/200MMX.....98/105
- Pentium® 233MMX.....129
- **Celeron 266 w/Fan.....175**
- Pentium® II 233/266.....195/239
- Pentium® II 300/333.....365/495
- Pentium® II 350/400.....610/815
- AMD K6-200.....79
- AMD K6-233.....89
- AMD K6-266/300.....165/265
- Cyrix M2-P200/233.....69/85
- Cyrix M2-P266.....155

MEMORY

- 8MB (2X32) EDO.....$14
- 16MB (4X32) EDO.....25
- 32MB (8X32) EDO.....45
- 64MB (16X32) EDO.....125
- 128MB (32X32) EDO.....CALL
- 16MB (2X64) SDRAM.....25
- 32MB (4X64) SDRAM.....45
- 64MB (8X64) SDRAM.....95
- 128MB (16X64) SDRAM.....195

MONITORS

- Impression 14" .28.....$140
- **Impression 15" .28.....175**
- Impression 17" .28.....305
- Impression 17" .25.....460
- Proton 17" .28.....295

ViewSonic
- E641 14" .28.....$165
- E655 15" .28.....235
- P775 17" .25.....485
- G810 20" .25.....965
- P810 21" .25.....1075

MAG
- DJ530 15" .28.....$210
- DJ700 17" .26.....390
- DX702E 17" .28.....370

SONY
- 100ES 15" .25.....$285
- **200ES 17" .25.....515**
- 200GS 17" .25.....580
- 400PS 19" .25.....925
- 20SE2T 20" .25.....1110

NEC
- A500 15" .28.....$265
- A700 17" .28.....465
- E1100 21" .28.....1030

HARD DRIVES

- SAMSUNG 2.1GB U-DMA.....$120
- SAMSUNG 3.2GB U-DMA.....135
- IBM 4.3GB U-DMA.....CALL
- IBM 6.4GB U-DMA.....230
- IBM 8.4GB U-DMA.....305
- IBM 4.3GB UW SCSI.....270

Quantum
- 2.1GB U-DMA IDE.....$135
- 3.2GB U-DMA IDE.....150
- 4.3GB U-DMA IDE.....175
- 6.4GB U-DMA IDE.....245
- 8.4GB U-DMA IDE.....325
- 12GB Bigfoot U-DMA IDE.....330
- 2.2GB UW SCSI.....180
- 4.5GB UW-SCSI.....345
- ATLAS II 9.1GB UW-SCSI.....695

Seagate
- 2.1GB U-DMA IDE.....$125
- 4.3GB U-DMA IDE.....185
- Barracuda 4.5GB UW.....465
- Barracuda 9GB UW.....705
- Cheeta 4.5 UW.....540
- Cheeta 9GB UW.....865

FUJITSU
- 3.2GB U-DMA IDE.....145
- 4.3GB U-DMA IDE.....170
- 6.4GB U-DMA IDE.....220
- 4.5GB UW-SCSI.....325

Western Digital
- 2.0GB Ultra-DMA IDE.....$130
- 2.5GB Ultra-DMA IDE.....140
- 32.GB Ultra-DMA IDE.....150
- 4.3GB Ultra-DMA IDE.....175
- 6.4GB Ultra-DMA IDE.....225
- 4.3GB UW SCSI.....450

Maxtor
- 2.1GB Ultra-DMA IDE.....$125
- 3.2GB Utra-Dma IDE.....145
- **4.3GB Utra-DMA IDE.....160**
- 5.2GB Utra-DMA IDE.....195
- 6.4GB Utra-DMA IDE.....205
- 8.4GB Utra-DMA IDE.....275
- 11.5GB Utra-DMA IDE.....385

PCI / AGP VIDEO CARDS

- Trident 9685 2/4M.....$35/50
- Trident 9750 AGP w/4M SGRam.....55
- S3 Virge 3D 2M/4M.....38/50
- STB Velocity 128 4M PCI/AGP.....128/125

DIAMOND MULTIMEDIA
- Steath 2000 Pro 2/4M Dram.....$50/60
- Steath 3000 2M/4M Vram.....94/134
- Stealth 4000 w/4M AGP.....75
- Viper V330 Riva PCI/AGP.....105/108
- Fire GL Pro 1000 4/8M AGP.....140/175
- Monster 3D 4/8M.....119/205

ATI
- ATI Pro Turbo w/TV 4/8M.....$90/150
- ATI 3D Xpression+ 2M/4M.....59/75
- ATI 3D Xpression+ w/TV 2M/4M.....70/90
- ATI Xpert@Work 4/8M.....87/110
- ATI Xpert@Work AGP 4/8M.....130/160
- ATI Xpert@Play 4/8M.....135/175
- ATI Xpert@Play AGP 4/8M.....142/180
- ATI All in Wonder 4M.....150
- ATI All in Wonder Pro 4/8M.....195/235

matrox
- Mystique II 4M OEM/Retail.....$78/105
- **Productiva G100 AGP 4/8M.....75/85**
- Millennium II 4/8M.....129/175
- Millennium II AGP 4/8M.....132/208

CONTROLLERS

- Diamond Fire Port 40 UW.....$85

Adaptec
- 2940 Utra SCSI.....$140
- **2940 Utra Wide SCSI.....155**

BACKUP UNITS

- Colorado T-3000 3.2GB.....155
- Colorado T-4000 8GB.....335

iomega
- 800MB Ditto Drive Int./Ext.....$99/130
- 3.2GB Ditto Drive Int.....179
- 100MB Zip Drive Int./Ext.....95/135
- 100MB Zip Drive Ext. SCSI.....135
- 1GB Jaz Drive Int. SCSI.....275
- 1GB Jaz Drive Ext. SCSI.....295

SOUND CARDS

- ESS 16-Bit.....15
- Yamaha 16-Bit.....15
- Genius 16-Bit Full Duplex.....18

CREATIVE
- Sound Blaster 16.....$39
- **Sound Blaster AWE 64.....$68**
- Sound Blaster AWE 64 Gold.....$138

CD-ROM DRIVES

- BTC 24X IDE.....$55
- Teac 24 / 32X IDE.....65/75
- Creative Labs24X IDE.....60
- Goldstar 24X IDE.....60
- Mitsumi 24X.....60
- NEC 24X SCSI.....90
- Mitsumi 2X8 CD-Writer IDE.....265
- **Panasonic 4X8 CD-Writer w/SCSI Cont. & Software.....395**

TOSHIBA
- XM-6102 24 / 32X IDE.....$67/75
- XM-5701 12X SCSI.....86
- Toshiba DVD Kit.....245

SONY
- CDU611 24X CD-Rom.....$70
- **CDU928E 2X8 CD-Writer IDE.....270**
- CDU926S 2X6 CD-Writer SCSI.....270

NETWORKS

- 16 BIT ISA Ethernet Combo.....$15
- **32 BIT PCI Ethernet Combo.....18**
- 32 BIT PCI 10/100 TP.....45
- Intel Express Pro-100, 10/100.....50
- 9/18/24 Port HUB.....50/90/210

3Com
- 3C509 TP/Combo.....$45/65
- 3C900 PCI TP/Combo.....70/80
- 3C905 PCI 10/100 TP.....58
- 3Com Office HUB 16 Port.....195

MICE & KEYBOARDS

- 3 Button Mouse Serial/PS-2.....$5/8
- **Logitech Mouseman (OEM) Serial /PS-2.....18/22**
- Mitsumi 104 Keyboard.....12
- Keytronic 104 Keyboard.....20
- Keytronic 104 w/ Mouse PS2.....27
- Focus 2001 104 Keyboard.....25

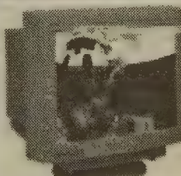
NOTEBOOK SPECIAL

IBM TP380D
Pentium® 150MMX, 16MB
2.1GB HD, 8X CD-Rom, Sound
12.1" TFT Display, Windows 95
$1650

CASES & POWER SUPPLY

- Mini Tower w/ 230W PS.....$22
- Super Mini Tower w/230W PS.....32
- Med. Tower w/ 230W PS.....42
- Full Tower Case w/250W PS.....55
- Full Tower Server w/300W PS.....125
- **ATX Mid Tower w/235W PS.....55**
- ATX Desktop w/235W PS.....65
- ATX Full Tower w/235W PS.....89
- 230W Power Supply.....19

PROTON



PROTON 17" 1280 X 1024 .26DP
$345
WWW.PROTON-USA.COM

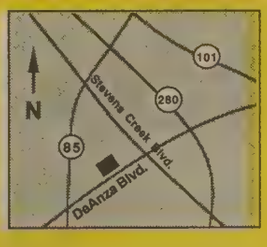
LMC

LEX MICROCOMPUTER

HOURS:
M-F 10AM-7PM
Sat 11AM-4PM

10555 S. DeAnza Blvd. # 125 Cupertino, CA 95014
Tel: (408) 873-3727 Fax: (408) 873-3729

MasterCard VISA



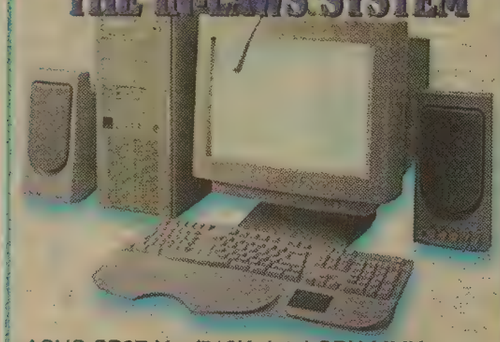
All brand names are registered trademarks of their respective owner.
Prices and availability subject to change without notice. Prices reflect cash discount. We're not responsible for typographical error.

The Best Prices.

Expert Personal Service Since 1993

2-Year Labor Warranty on All Systems • On-site Service

THE IN-LAWS SYSTEM

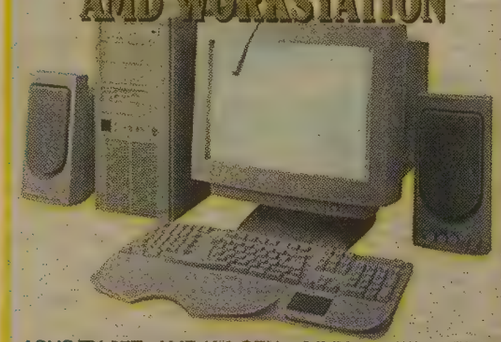


•ASUS SP97-V w/512K •Intel CPU MMX
•32MB EDO SIMMs 72pin
•2.1GB Western Digital EIDE HD
•4MB Video on Board •SB-16 Compatable
•24x CD-ROM •56K Fax/Modem
•Speakers, Mouse •Case •Windows 95 w/CD
•104K Keyboard

Pentium® 166MMX . . . $579
Pentium® 200MMX . . . $619

15" Monitor add: $190
I-Omega ZIP add: $89

AMD WORKSTATION



•ASUS TX-97E •AMD K-6 CPU w/MMX
•32MB EDO SIMMs 72pin
•Western Digital 4.3GB UDMA
•Diamond Stealth 3D 2000 w/4MB
•Creative Labs Sound Blaster 16 •24x Toshiba CD-ROM
•56K X2 of K-Flex Compatible
•I-Omega Zip 100MB EIDE •104K Mitsumi
•Acer 60W, Mini Case •Win 95 w/CD

K6-233 . . . . . $999
K6-266 . . . . . $1219

64MB upgrade add: $52
32X CD-ROM add: $10
15" Monitor $190

PENTIUM® II AGP SUPER SYSTEM

•ASUS P2L97 •Intel CPU PII •64MB SDRAM 168pin DIMMs
•Western Digital 6.4GB UDMA
•Diamond VIPER V330 w/4MB •Teac 32x EIDE
•56K X2 or K-Flex Compatible
•Creative Labs 64 AWE •Speakers, M.S. Mouse
•Windows 95 w/CD •ATX Medium Tower Case
•104 Keyboard

Pentium® II 166 . . . $1499
Pentium® II 300 . . . $1774

Monster 3-D add: $165
300MHz P-II add: $275
15" Monitor: $190

EIDE / UDMA HARDDRIVES

Fujitsu
1.2GB EIDE $119
3.2GB UDMA $151
5.2GB UDMA $199
6.4GB UDMA $235

Quantum
1.6GB UDMA $149
2.1GB UDMA $138
3.2GB UDMA $172
4.3GB UDMA $198
6.4GB UDMA $251

Western Digital
2.1GB UDMA $129
3.2GB UDMA $158
4.3GB UDMA $179
6.4GB UDMA $239
8.4GB UDMA $339

SCSI HARD DRIVES

IBM
2.1GB UW SCSI 32160W $229
4.3GB U SCSI 34330U $289
4.3GB UW SCSI 34330W 5400RPM $269
4.5GB UW SCSI 34550W 7200RPM $675
9.1GB UW SCSI 39100W 7200RPM $709

Quantum
2.1GB Tempest SCSI II $225
2.1GB Ultra SCSI $325
2.1GB UW SCSI Atlas $339
4.5GB UW SCSI 34550 Atlas $549
9.1GB UW SCSI 39100 Atlas $795

SCSI HARD DRIVES CONT.

Seagate
2.0GB UW SCSI 32550 . . . . . $289
2.1GB UW SCSI 32171W $489
4.0GB SCSI II 15150 . . . . . $399
4.5GB Ultra SCSI 34572N $529
4.5GB UW SCSI 34501 10,000RPM $649
9.1GB Ultra SCSI 19171N $859
9.1GB UW SCSI 19171W $739
9.1GB Ultra SCSI 19101N 10,000RPM . $929
9.1GB UW SCSI 19101W 10,000RPM . . $969

Western Digital
2.1GB E2170 Ultra SCSI $289
2.1GB E2170 UW SCSI $319
4.3GB E4360 Ultra SCSI $498
4.3GB E4360 UW SCSI $509
9.1GB Ultra Wide SCSI $779

MONITORS

Iiyama
8515G 15" .28dp $280
8617E 17" .26dp $505
9017E 17" .25dp $599
450 19" .26dp $799
8721E 21" .30dp $1,199
9221E 21" .28dp $1,265
31CM LCD 13.8" $2,399

ViewSonic
E641 14" .28dpi $185
E655 15" .28dpi $245
G771 17" .25dpi $489

MONITORS CONT.

ViewSonic Cont.
PT-771 17" .25dpi $599
G800 20" .28dpi $939
PT-813 21" .25dpi $1,289
P815 21" .25dpi $1,375
29GA 29" .28dpi $1,799

ART Media
1664 15" .25dpi $309
1864 17" .25dpi $569
1885 17" .25dpi $729

SONY
100ES 15" .25dpi $339
100GS 15" .25dpi $369
200ES 17" .25dpi $599
200GS 17" .25dpi $799
500PS 20" .30dpi $1,679

Impression
3+ 14" .28dpi $149
5VX 15" .28dpi $209
7+ 17" .27dpi $409
Vienna Pro 17" .25dpi $549
Vienna Pro 21" .28dpi $1,276

Relisys
14" .28dpi $137
15" .28dpi $189
17" .26dpi/.28dpi $305/295

NEC
P-750 17" .25dpi $769
P-1150 21" .28dpi $1,319

MOUSE

Logitech
My First Mouse $14
Mouseman II $24
Trackman Marble $49

Microsoft
M.S. Serial Mouse $26
M.S. PS/2 Mouse $28
M.S. IntelliPoint $39

Artec
Artec 3b Mouse $7

KEYBOARDS

Microsoft
Natural 104K $49

Keytronics
104K Win95 . . . . . $22

Mitsumi
104K Win95 . . . . . $13

NOTEBOOKS

Chembook . . . . . $CALL FOR PRICING

LABOR RATES

CPU Install $15
Memory Install $15
Motherboard Install $45
Hard drive/DR-Rom Install $45
Data Transfer $85
System Upgrade $60
System Assembly $35

NCAL Computer Source

4825 Hopyard Rd. • Pleasanton, CA 94588

(510) 460-0580

FAX (510) 460-0591

ncal@inreach.com

Next to Chili's & Lyon's

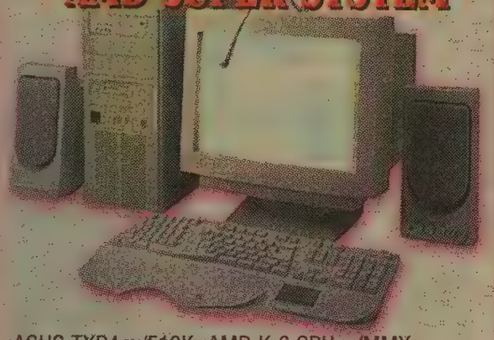
May 20, 1998 • Mention MicroTimes

Hours:
Mon-Fri: 9am-6pm
Sat: 10am-4pm

NCAL is not responsible for any typographical errors. Shipping, C.O.D., & Insurance are extra and non-refundable. 1-year parts 2-year Labor Warranty on new systems. 15% restocking fee will be charged on all returned items over 3 days. Price matching only applies to local vendors. Mail order, closeouts & refurbished are excluded. ALL PRICES ARE FINAL ON DATE OF PURCHASE. All prices are subject to change without obligation or notice.

We've Expanded, Twice the Size & Selection
Custom Configuration • Network Configuration
Delivery • Installation • Repairs • Upgrades • Complete Service for Your Home & Business

AMD SUPER SYSTEM

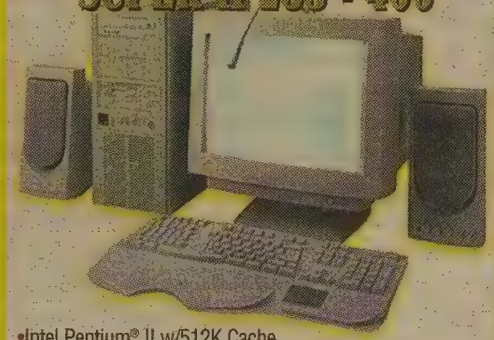


•ASUS TXP4 w/512K •AMD K-6 CPU w/MMX
•64MB EDO SIMM 72pin •Creative Labs SB-16
•6.4 Western Digital UDMA •24x CD-ROM
•Diamond Stealth II S220 4MB •104 Keyboard
•56K Fax/Modem •Speakers, Mouse
•Case •Windows 95 w/CD

K6-233 . . . . . $1019
K6-266 . . . . . $1279

128MB upgrade add: $89
ATX Form factor add: $39
15" Monitor add: $190

SUPER II 233 - 400



•Intel Pentium® II w/512K Cache
•64MB RAM •2MB EDO AGP Video Card
•4.3GB Western Digital UDMA •24X Toshiba CD-ROM Drive
•1.44 Teac Floppy •33.6 Fax/Modem
•16-Bit Compatible Sound Card
•Stereo Hi-Fi Speakers •Medium ATX •Logitech Mouse
•Windows 95 w/CD

233/266 . . . . $990/1119
300/333 . . . $1229/1419
350BX/400BX $1499/1699

SPECIALS • SPECIALS

ASUS SP-97 Motherboard w/Video/UDMA/512K up to 300Mhz **$79**	I-OMEGA ZIP Drive **$89**
LANPRO 8-Port Hub **$68**	3COM 3C905 10/100T **$65**
IIYAMA 17" SVGA .25 dp **$599**	ADAPTEC 2940UW **$185**

MOTHERBOARDS:

ASUS
SP-97V w/Video & 512K w/3 ISA 4 PCI $85
TX97 W/ 512K w/ 4 ISA 4 PCI & SDRAM . . $139
TX97-E w/ 512K w/ 3 ISA 4 PCI $139
TX97-X w/ 512K w/ 4 ISA 4 PCI & SDRAM $139
TX97-XE w/ 512K w/ 4 ISA 4 PCI $141
TX97-X w/ Audio & 512k & SDRAM $179
TX97-XE w/ Audio & 512k $179
P2L97 P-II w/ 1 AGP; 2 ISA; 5 PCI $158
P2L97S P-II w/ 2940UW 1 AGP;4PCI; 2ISA . $249
P2L97DS Dual P-II w/ AGP & UW 4 PCI 2 ISA $390
ASUS 440BX 100MHz. $198

ABIT
LX6 PII motherboard w/AGP $152
BX PII motherboard w/AGP. $197

Intel
Venus Pentium® Pro $145
Providence Dual P-Pro w/ 10-100, UW, Sound $219
Atlanta P-II w/ AGP. $185
Atlanta P-II w/ AGP w/ Sound $199
SE 440BX. $197

CPU & MEMORY

Intel
P-150/166/200 . . . . . $96/109/160
MMX 166/200/233 . . . . . $109/152/189
P-II 233/266/300. . . . . $289/390/499
350/400. . . . . $615/895

AMD
K5 75/133/166 . . . . . $38/65/99
K6 w/MMX 166/200/233 . . . . . $98/105/119
K6 266/300, Low Voltage, Low Heat . . $219/289

CPU & MEMORY CONT.

Cyrix
6x86 166/200 . . . . . $59/65
6x86 MMX 166/200. . . . . $89/125

SIMMS
2x32 (8MB) FP/EDO/PARITY $16/17/21
4x32 (16MB) FP/EDO/PARITY $31/24/36
8x32 (32MB) FP/EDO/PARITY $49/48/51

DIMMS
2x64 (16MB) SDRAM/EDO/ECC $39/CALL
4x64 (32MB) SDRAM/EDO/ECC $56/CALL
8x64 (64MB) SDRAM/EDO/ECC $159/CALL
16x64 (128MB) SDRAM/EDO/ECC . . $299/CALL

VIDEO CARDS

Diamond
Stealth 3D-2000 w/ 2MB/4MB PCI $59/71
Stealth II S220 w/ Rendition and 4MB SGRAM $98
Viper V330 w/ 4MB PCI & AGP $149
Monster 3D 3Dfx w/ 4MB EDO PCI $156

ATI
ALL-IN-WONDER 4MB Tuner/Capture PCI . . $198
AGP PRo 8MB $259
Xpert@Play 4MB/8MB PCI & AGP . . . $169/219
Xpert@Work 4MB/8MB PCI & AGP. . . $169/219

Matrox
Millennium II 4MB/8MB PCI & AGP . . $159/229
Mystique 220 4/8 PCI $129/199

VIDEO CARDS CONT.

Matrox
m3D add on board $89

Trident
ISA w/512K / PCI w/1MB $35/35

NETWORK CARDS

3Com
3c509 TP/COMBO ISA $79/89
3c900 TP/COMBO PCI $69/75
3c905 10/100 PCI. $65

Intel
10/100 PCI $65

LAN Pro
ISA/PCI Combo $17/29

CD-ROM

NEC
24x SCSI $119

Toshiba
24x/32x EIDE. $69/89
15x SCSI $98
DVD Cinemaster $289

Teac
24x EIDE $75

CD-WRITER

Yamaha
CDRW 4001 4x6 int/ext $499/569

Phillips
CDR 6200S 2x6 int/ext. $445/495

HP
7200 IDE $389

Mitsubishi
CDRW 2x2x6 SCSI $489

REMOVABLE STORAGE

I-Omega
Zip 100 EIDE $89
Zip 100 SCSI int/ext. $135/139
Zip + 100 ext $195
Zip 100 Cartridges $12

HP
2.6GB 5GB Compressed $229

SCSI ADAPTERS

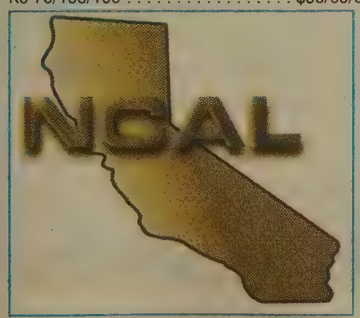
Adaptec
2940U Ultra SCSI $175
2940UW Ultra-Wide SCSI $185
3940UW Multi Channel $409
1522 ISA SCSI II w/Floppy $75
1520 ISA SCSI II w/o Floppy. $69

ASUS
SC-200 SCSI II req. ASUS mb. $69

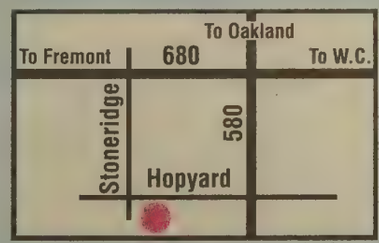
PRINTERS

HP
Laser Jet 6LXI/PXI $375/739
Laser Jet 4000T/4000. . . . . $1,319/1,139
Color Laser Jet 5 . . . . . $3,789
Desk Jet 820CXi $255
Desk Jet 870CXi $369
Desk Jet 1600C $1,285

Epson
Stylus 400/600/800. . . . . $189/225/315



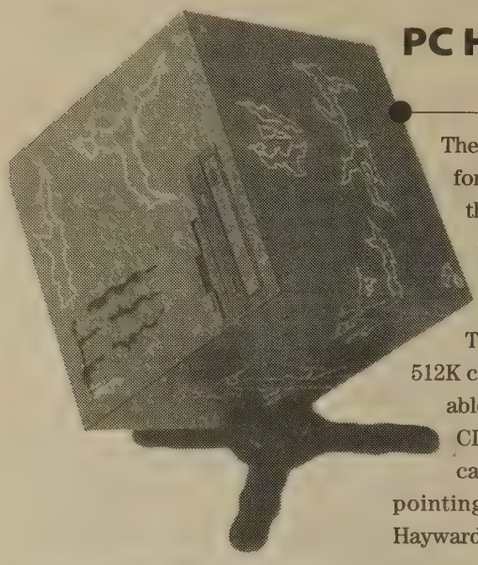
NCAL Computer Source
4825 Hopyard Rd. • Pleasanton, CA 94588
(510) 460-0580
FAX (510) 460-0591
www.ncal.ml.org **ncal@inreach.com**



In Gateway Square

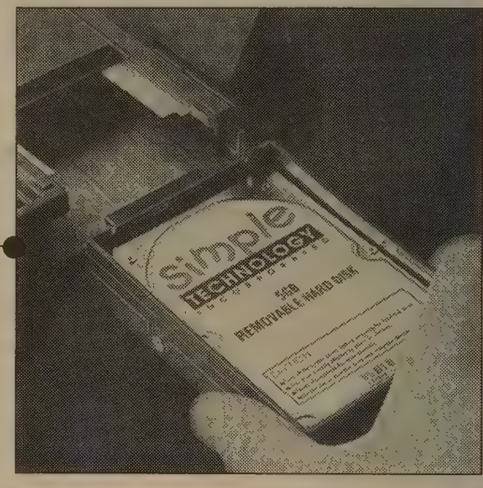
continued from page 156

PC Hardware (cont.)



Rock City ST-200

The Rock City ST-200 is a new desktop computer combining a futuristic aluminum cube design with high performance and low price. The Rock City chassis is a 10.5" cube on a distinctive "on point" mounting system that gives the illusion of having your computer hover over the desk. The design results in a footprint that is 60% smaller than conventional systems. It is made from aircraft grade aluminum plate, anodized in colors such as cobalt blue or black mamba and etched with an interconnected lightening motif. It features an Intel 200MHz Pentium with MMX or x-86-compatible processor with AGP and 100MHz bus capability. The Rock City ST-200 includes six expansion slots, two external and three internal expansion drive bays, 512K cache, 3D sound card, stereo speakers, 32MB SDRAM (expandable up to 384 MB), 3GB hard drive, 3.5" floppy drive, 32X IDE CD-ROM drive, 56K modem Windows 95, 2MB PCI SVGA video card, and Euro-style wireless infrared keyboard with integral pointing device. ($995) Panda Project, Inc., 1455 Crocker Ave., Hayward, CA 94544. 1-888-ROC-CITY. *www.rockcity.net* .



5GB Removable Hard Drive

This new 5GB EIDE 2.5" hard drive offers laptop users hard disk capacity on par with many of todays desktop systems. It is compatible with leading laptops including popular manufac tures as IBM, Compaq, Fujitsu, Hewlett-Packard, and NEC. The drives are designed for easy installation and are equipped with a connector and caddy that are identical to the proprietary designs of the these leading portables. Simple Technology bundles its drives with EZ Drive software, which offers backward compatibility of the new drive for older laptops. The bundled software also provides data mirroring. ($979.95) Simple Technology, Inc., 3001 Daimler St., Santa Ana, CA 92705. (714)476-1180. *www.simpletech.com* .

If you enroll in the full program and mention this ad, you'll receive a 20% discount.

CNE & MCSE AT NIGHT

Authorized Technical Education Center Microsoft

Novell EDUCATION AUTHORIZED CENTER

EVERNET EDUCATION SERVICES

CALL TODAY

1-800-447-3658

(Local: 415-764-1400)

If you aspire to be a Certified Novell Engineer (CNE) or a Microsoft Certified Systems Engineer (MCSE), but have trouble getting time off during the day, Evernet Education Services has the program for you. Evernet is now offering CNE & MCSE courses in the evening!

Our scheduled courses will be conducted in our state-of-the-art classrooms with certified instructors to ensure you gain all the knowledge required to pass the certification tests. And, the best part is you can take the courses in non-business hours and not upset your boss.

Night classes will be starting soon in The Bay Area, so call us today for a free class schedule and more information on how you can get your CNE or MCSE Certificate. Seating is very limited and will be guaranteed on a first-serve basis.

Evernet is now an InfiLearning center...What this means to you is that not only can you obtain the best in Instructor Led Training but we can offer you On-Line Training, CBT's, Video's and other self study materials.

Would you like to use your companies Tuition Reimbursement program to pay for your classes...Well now you can!!! Evernet is an ITCAP center making their Novell and Microsoft classes available for college credits. Call and ask a consultant about this and Microsoft's Skills2000 loan program.

San Francisco • Los Angeles • Sacramento

Perfect Solution Multimedia Inc.

Serving You Since 1984

7-Year Labor & 1-Year Parts Warranty on All Computers

FREE DELIVERY FOR CORP. CUSTOMERS!

Intel Pentium® II System, 440BX M/B, 64MB SDRAM, 512K, 6.4GB, 17" Sony, 8MB Fire GL 1000 AGP

- Freetech Motherboard, 440BX Chipset w/CPU Cooling Fan
- **64MB** SDRAM DIMM
- 1.44MB TEAC Floppy Drives
- **6.4GB Fujitsu Ultra** IDE Hard Drive
- Enhanced PCI HD Controller w/High Speed I/O
- **8MB Diamond Fire GL 1000 Pro AGP Graphic Card**
- Sound Blaster 16 Sound Card & 180W Speakers
- 32X Mitsumi IDE CD-ROM
- ATX Medium Tower Case w/2nd Cooling Fan
- 104 Keytronic PS2 Keyboard
- Logitech Mouseman PS2 Mouse
- **17" Sony 200ES** .25 MPR-2 Green Monitor
- 7-Year Labor, 1-Year Parts Warranty

P2-400MHz 2549 | P2-350MHz 2334 | P2-333MHz 2199 | P2-300MHz 2069 | P2-266MHz 1939 | P2-233MHz 1894

Intel Pentium® II System, Freetech M/B, 512K Cache, 32MB SDRAM, 4MB ATI Xpert @ Work 4.3GB Ultra, 17" Proton

- Intel Freetech Motherboard 440LX Chipset, 512K L2 Cache
- **32MB SDRAM DIMM** (Max 256MB)
- 1.44MB TEAC 3.5" Floppy Drive
- **4.3GB Fujitsu** Ultra IDE Hard Drive
- Enhanced PCI HD Controller w/High Speed I/O
- **4MB** ATI Xpert @ Work AGP Graphic Card
- Sound Blaster 16 Sound Card & 180W Speakers
- 24X Mitsumi IDE CD-ROM
- ATX Medium Tower Case w/2nd Cooling Fan
- 104 Keytronic PS2 Keyboard
- Logitech Mouseman PS2 Mouse
- 17" Proton 1280x1024 .25 (NEC Tube) Green Monitor
- 7-Year Labor, 1-Year Parts Warranty

P2-333MHz 1749 | P2-300MHz 1619 | P2-266MHz 1489 | P2-233MHz 1441

Multimedia Kits

24X Kits

- 24X Mitsumi IDE CD-ROM Drive
- 70-Watt Speakers
- American Concise Encyclopedia

w/ESS 1869 3D Sound Card $116

w/Sound Blaster 16-Bit Sound Card. . . $139

w/Sound Blaster AWE 64 Sound Card . $169

Networks Designed & Installed

Networking Products . . . . . CALL

Pentium® T-4 (430TX) ATX Based System 512K Pipeline, 32MB EDO, 4.3GB, 2MB Diamond 3D, 17" Proton Monitor

- PCI Motherboard Manufactured by FREE Technology
- Intel 430TX Chipset, ACPI Power Management
- **512K** Pipelined Cache & Cooling Fan
- 32MB EDO RAM (Expandable to 256MB)
- 1.44MB TEAC Floppy Drive
- **4.3GB Fujitsu** IDE Hard Drive
- Enhanced IDE, Supports Ultra DMA/33 High-Speed I/O, Two USB Ports
- **2MB Diamond Virge 3D, EDO RAM Graphics Card**
- ATX Medium Tower Case with 2 Cooling Fans
- 104 Keytronic PS2 Keyboard
- Logitech Mouseman PS2 Mouse
- 17" Proton 1280x1024 .25 (NEC Tube) Green Monitor
- 7-Year Labor Warranty, 1-Year Parts Warranty

233MMX 1109 | 200MMX 1079

PS Performance System Pentium® Based System 16MB, 3.2GB, 15" Proton Monitor

- PCI Motherboard Manufactured by FREE Technology
- Intel 430 VX Chipset, **512K** Pipelined Cache & CPU Cooling Fan
- **16MB** EDO RAM
- 1.44MB TEAC Floppy Drive
- **3.2GB Fujitsu** Hard Drive
- Enhanced PCI HD Controller w/High Speed IO
- **2MB Trident PCI** Graphics Card
- Medium Tower Case
- 104 Keytronic Keyboard
- Logitech Mouseman PS2 Mouse
- 15" **Proton** 1280x1024 .28 MPR-2, digital, Green Monitor
- 7-Year Labor Warranty, 1-Year Parts Warranty

233MMX 809 | 200MMX 779

Intel Pentium® 133MHz, 16MB, 3.2GB, CD, 33.6 Modem, SVGA NI

- Intel 430TX Chipset, 512K Cache
- **16MB** EDO RAM
- **3.2GB Fujitsu** Hard Drive
- 1.44 TEAC Floppy Drive
- Enhanced PCI Controller
- 2 Serial, 1 Parallel Ports (High Speed)
- 2MB Trident PCI Graphics Card
- 33.6 Voice Fax Modem, Sound Card, & Speakers
- 24X Unitron CD-ROM Drive
- Mini Tower w/Power Supply
- 101 Enhanced Mitsumi Keyboard
- Mitsumi Mouse
- 14" Proton 1024x768, .28 SVGA Non-Int Full Screen Monitor w/72Hz Refresh Rate
- CPU Cooling Fan
- 7-Year Labor Warranty, 1-Year Parts Warranty

$759

CONTROLLERS

IDE w/I/O	$25

SOUND CARDS

ESS 1869 Sound Card w/3D Sound	$25
Sound Blaster 16	49
Sound Blaster AWE 64	79

FAX MODEM

33,600 Voice/Fax Modem	$54
56K Voice/Fax Modem	79
US Robotics 56K w/Voice Int.	119

MULTIMEDIA

24X Mitsumi IDE CD-ROM	$69
60-Watt Speakers, Magnetically Shielded	19

SVGA NON-INTERLACED MONITORS (Green)

14" Proton 1024x768 .28	$159
15" Proton 1280x1024 .28 Green Digital	229
17" Proton 1280x1024 .25 (NEC Tube)	399
17" Sony 200ES 1280x1024 .25	619

CASE & POWER SUPPLY

Mini Tower w/230W	$39
Medium Tower w/230W	52
ATX Form Medium Tower	79
ATX Form Full Tower	94

MOUSES

Logitech Mouseman PS/2 or Serial	$29
Mitsumi Serial Mouse	9.50
Mitsumi PS/2 Mouse	12

OPERATING SYSTEM (w/System Purchase)

Windows 95, CD (SR-2) ver.	$89

DRIVES

Teac 1.44MB	$32
Panasonic 1.2MB	46

DISPLAY CARDS

1MB Cirrus Logic	$39
2MB Trident PCI	39
2MB Diamond Virge 3D 2000 Pro RAM PCI	69

Prices subject to change, not responsible for typographical errors. Pentium is a registered trademark of Intel Corp.

10032 San Pablo Ave.
El Cerrito, CA 94530
(510) 527-6908

VISA COD MasterCard

OPEN 6 DAYS
Mon-Sat: 9:30am to 6pm
FAX (510) 527-3823

PalmPilot Software

Actioneer For PalmPilot

Actioneer for PalmPilot streamlines the entry of action items by intelligently interpreting, or parsing, information entered by the user into its simple user interface. It automatically links an individual action item to the corresponding DateBook, To-Do, List, and/or Memo Pad Palm application. A single entry of an action item, for instance "call Sue on Wednesday," can be automatically distributed to the databases of one or several of the built-in Palm applications. Users need only to capture a "to-do" once, without having to navigate to other applications or enter the same information twice. During installation, keywords are automatically generated for all Memo Pad or To-Do List categories. For example, the keyword "business" would be created for a Business category; any action item entered with the word "business' in it would show up in the Business To-Do List. ($19.95. Currently available free of charge from Actioneer's Web site) Actioneer, Inc., 539 Bryant St., San Francisco, CA 94107. (415)536-0700. *www.actioneer.com* .

Web Software/Server Software

Real-time Page Management

Real-time Page Management (RPM) keeps Web sites up-to-date and accurate by placing authorship in the hands of those ultimately responsible for content, while extending new levels of centralized control to management. Access can be set to the entire Web site or limited to a designated portion. Authorized content providers make changes through secured password protected, encrypted access—via any existing email program. The RPM Information Management System tool set enables the establishment and enforcement of updating policy. RPM is extended throughout an organization by installing add-on software to either UNIX or NT servers. (Price is based on the number of servers utilized and the number of "virtual ports" created across the Web presence. $2490, each server, includes the IMS management module, five virtual ports, and five PRMMail Editor packages. Additional virtual ports are available for a one-time licensing fee of $199 each in quantities under 100) Reedy Creek Technologies, LLC, 284 Reedy Creek Rd., Four Oaks, NC 27524. (919)934-6869. *www.reedycreek.com* .

Macintosh Hardware

Smart Serial 6: T1 Edition

Ideal for PowerPC Macintosh servers, the T1 Edition combines a Smart Serial 6 high-speed serial communications card with specially developed HDLC line drivers and a synchronous PPP Communications Toolbox tool. This card includes four ports—of which, two support T1 rates. You can, for example, use one or both of the higher speed ports for Internet or intranet connections, while saving the other four ports for PPP dialup connectivity to FileMaker databases, or routing out onto the Internet. This enables Mac servers to match NT capability at lower cost. ($699) Keyspan, Inc., 3095 Richmond Pkwy., #207, Richmond, CA 94806 (510)222-0131. *www.keyspan.com* .

SERVICE FIRST!

Great systems at unbelievable values a close second

Upgrades & Accessories

Yamaha Soundcard $19
ESS Soundcard.....$15
S/B 16 .....$39
S/B 64 .....$70
USR 33.6/56K.....$69/99

Monitors:
14"/15"/17"/19"$119/149/289/769
Diamond 2000 Pro 4MB PCI.....$95
Mill II PCI 4/8MB $129/169
Viper V330 4MB PCI/AGP $139
Monster 4MB PCI $149
Monster II 12MB PCI.....$249

Network Products

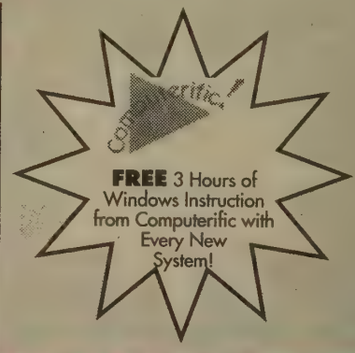
16 bit 10/T $16
32 bit 10/T PC $18
4 port hub $36
8 port hub $55
19 port hub $84

Modems:
33.6K/56K F/M w/Voice (Flex) $49/79
USR 33.6/56K F/M $79/129
Keyboards $12–89
Mice $10–59
Lotus SmartSuite $89
WordPerfect Suite 8 .....$89
Office 97 .....$175

CyberTek System

• M/B, case, cpu+fan, 14" Monitor, Keyboard, Mouse, 32MB RAM, 2MB Video, 2.1GB HD, FD, 24X CD, SC, Speakers, Windows95

Pentium®		Pentium® II	
166MMX	$760	233MMX	$958
200MMX	$770	266MMX	$1000
233MMX	$790	300MMX	$1119
266MMX	$855	333MMX	$1351
300MMX	$945	350MMX	$1457
		400MMX	$1650



Custom Order a Computer That Suits Your Needs

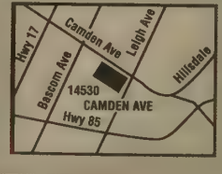
Try Customizing with Great Products, including:
AMD 3Com HEWLETT PACKARD US Robotics intel. FUJITSU IBM ACER UMAX

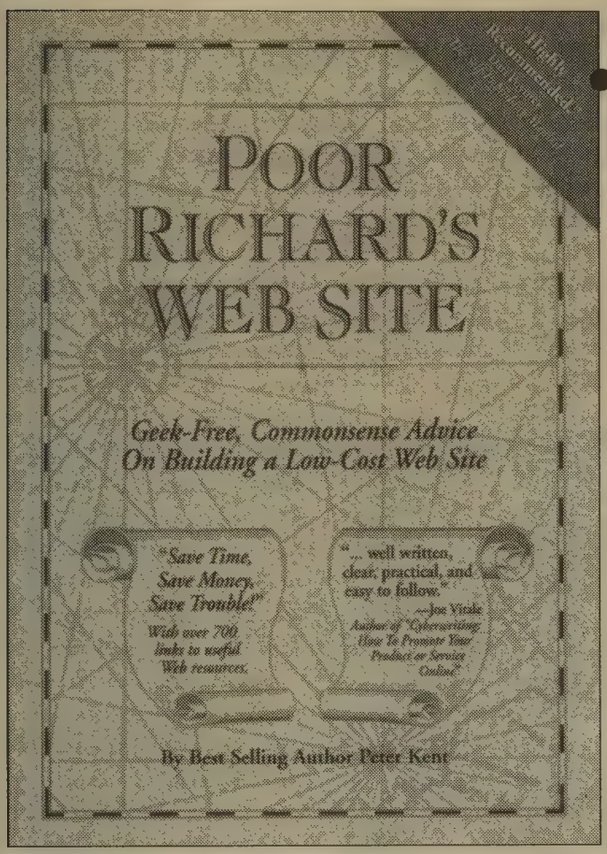
CyberTek Computer
THE GRID

Your friendly neighborhood computer store!
Come in and let our helpful staff help you build the right computer for you.

14530 Camden Ave. • San Jose, CA 95124
Tel: (408) 559-9499
Fax: (408) 559-3114

Prices and availability subject to change without notice. Limited stock on sale items. Not responsible for typographical errors.




Highly Recommended
POOR RICHARD'S WEB SITE
Geek-Free, Commonsense Advice On Building a Low-Cost Web Site
"Save Time, Save Money, Save Trouble!"
With over 700 links to useful Web resources.
"... well written, clear, practical, and easy to follow."
—Jon Vitale
Author of "Cybersizing: How To Promote Your Product or Service Online"
By Best Selling Author Peter Kent

Books

Poor Richard's Web Site

Claiming to be the only book that explains all the steps you need to take to set up a Web site—in a down-to-earth, easy-to-understand, geek-free style! You'll learn everything you need to know, not some complicated programming language. The book advises on things such as a low-cost method of creating Web sites that really work and without blowing the budget. You'll find out the answers to questions such as: Do you really need a Web site? What are the different ways you can use your site? Where can you put your site? How do you find a Web-hosting company? How can you create Web pages? How can you take orders online? How can you make sure your Web site works properly? And many more. The Internet provides a fantastic new tool for promoting your ideas—if you know how to use it. Millions of people are fumbling around on the Web, spending too much money for their Web sites, spending too much time creating them, and getting little in return. This book says you don't have to join them; find out how to build a low-cost Web site, how to build it efficiently and quickly, and how to make your Web site work for you. ($37.95) Top Floor Publishing, 1-800-247-6553. *www.poorrichard.com* .

Year 2000 Readiness Kit

Developed by the Information Systems Audit and Control Association (ISACA), this booklet contains tools that will help raise awareness of potential problems within an organization and provides suggestions for enlisting support of executive management. It also includes a detailed checklist of key questions to address, a Year 2000 (Y2K) compliance assessment grid, and a related article reprinted from the *IS Audit & Control Journal's* special Y2K issue. The *Year 2000 Readiness Kit* is available free to IT audit and control professionals. ISACA, (847)590-7466. *jperry@isaca.org* . ◆

Protect Against Unauthorized Access & Information Loss
Protect Your System Against Viruses
Protect Against System Failure

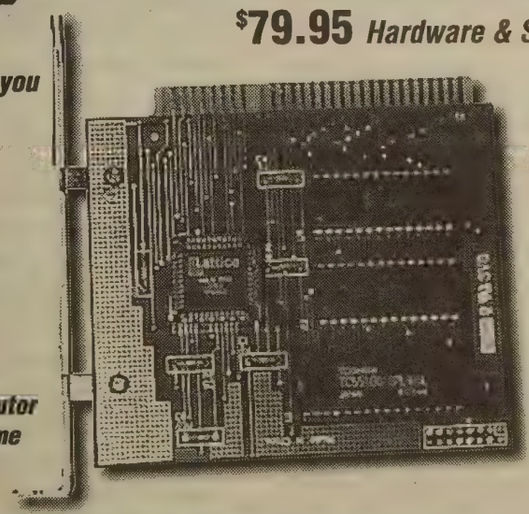
FREE 10 DAY TRIAL
Download Software Ver. from our Web Page

Only With SecurityEye

$39.95 Software Version
$79.95 Hardware & Software Version

SecurityEye is the only product of its kind to provide complete privacy and protection for your system. No other product allows you this much control and peace of mind!

- Maintain your privacy while protecting unauthorized access
- Protect against a system crash, or disk formatting
- Prevent accidental or unathorized modification of important files
- Blocks all viruses changing or ravaging system files or user data
- Prevent children from accessing Web browsers and chat programs



Available at T zone

MAGIC COMPUTER CORPORATION

Reseller & Distributor Inquiries Welcome

15250 Hesperian Blvd · San Leandro, CA 94578
Tel (510) 317-6688 · Fax (510) 317-6854 · www.magic-computer.com · Email: Sales@magic-computer.com

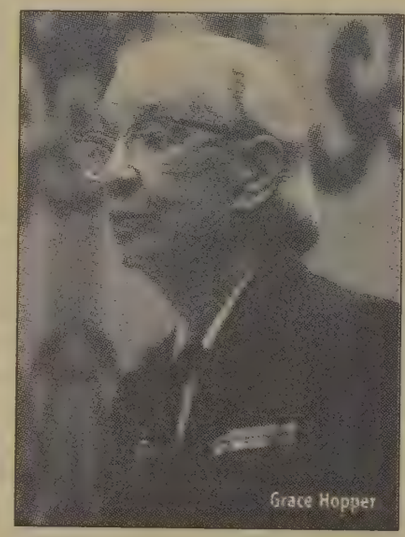
Gulch Gossip

By Jonathan E.

So, although this is a "dirty little gossip column," Sylvia asks, "Yeh, why don't you plug GraceNet? It's a group of women in computing who want to network to help each other out."

Davis Family Plot

While asking me for some trivial information, **Sylvia Paull**, undoubtedly a member of the Davis clan by living-together-with-partner association, saw fit to call this literary endeavour a "dirty little gossip column." She wouldn't tell me what she needed the information for, saying that it would turn up here. Of course, all dirty gossip columnists, whatever their size, have their own secret ways and I soon knew that she was helping to find a buyer for ***Mondo 2000***. Secretly, of course. Well, there's the info that she wouldn't tell me for fear of it appearing here!


Grace Hopper

She had only recently appeared in a real gossip column, although one that is hardly little or dirty. **Chris Nolan**'s words in the ***San Jose Mercury News*** are, of course, of an entirely elevated standard even when discussing the money-grubbing antics no longer behind the scenes of Digital Dames. As Sylvia writes, "Christine C. dissolved the group by fiat, then reformed it with admission by fees: $750 per year plus $10K annual corporate sponsorship REQUIRED, but $30 just to go to a meeting! I blew my stack, I recruited most of the members. Now we have a new, open, and el-cheapo group called **GraceNet** (for **Grace Hopper**). Guess I'm not getting invited to schmoozefests (TM!) anymore."

So, although this is a "dirty little gossip column," Sylvia asks, "Yeh, why don't you plug GraceNet? It's a group of women in computing who want to network to help each other out. A whole bunch of great women are joining, including **Kim Polese**, **Anita Borg** (Xerox PARC computer scientist, founder of the Women and Technology Institute, former scientist at DEC), **Anu Shukla** (founder of Rubric), **Paulina Borsook**, the Technorealist, Hop Tarrant."

GraceNet is a charming and appealing name but I had to confess my ignorance of who the inspiring Grace Hopper was. Sylvia quickly elucidated, "Grace Hopper invented COBOL. She was an admiral in the US Navy, invented encryption, popularized the term 'bug' and inspired lots of women to get into computing. I think there are plenty of sites dedicated to her... just **Ask Jeeves!**" [Mandatory disclosure: The Ask Jeeves! search service at *www.askjeeves.com* is, or was, one of Sylvia's PR clients. No secrets are safe around here today.]

However, the real, authentic Davises by blood, are also stirring things up. **Fred Davis** has a new company, **Lumeria**, that he started with **Michael Hauser**, **Fen Labalme**, and **Don Sawtelle**. The purpose of the company is to make it easier to work with your own personal information over the Internet. There's a Web site at *www.lumeria.com* that explains a little about what this means and also has a lot of handy-dandy quotes from some of the principals' favorite authors and speakers as well as their rather extensive bios. As Sylvia says, "They're all pretty smart, so I hope they find someone with an IQ under 120 to take on the more menial chores, like printing business cards and ordering a coffee machine."

Lumeria's office is at El Cerrito Mall, something that makes Sylvia exclaim, "How ignominious!" However, I think that the huge and half-deserted shopping mall offers some distinct advantages over a trendier location like South Park. For a start, El Cerrito Mall (I think its formal name is actually El Cerrito Plaza) avoids the number one problem of Multimedia Gulch turned up by the Multimedia Summit, parking and traffic! There are literally acres of available parking and it's only a block from BART. The emptiness of the mall also provides a valuable perspective on the erosion of yesterday's dreams and then-thought-to-be sure things by today's business conditions along with direct coach service to the gambling casinos of Reno. There's also a farmer's market twice a week and a selection of truly peculiar remaining stores, bars, and delis. All told, it's an idiosyncratic and entertaining place, much more suited to creativity and with broader demographics, than the Gulch with all its shiny, off-the-shelf atmosphere of prefabricated glamour. In the future, all startups that are more concerned with their product than their image will look for space in run-down shopping centers.

Meanwhile, **Nina Davis**, tired of merely being my favorite avatar, an enhanced data filter, and a veritable gossip writer in-waiting as in her guest-writer appearance in this column last month, has

cofounded yet another company, **A3Ventures**. Her cofounder is **Adriaan Ligtenberg**, originally from Holland and with a string of impressive previous ventures including **C-Cube** and **Storm Technology**. More detailed info on all these can easily be found at or linked to from the site, *www.a3ventures.com* , which is still in its own early days but does reveal that the purpose of A3 is "the commercialization of future technology." Nina heads up the market research and is currently looking in depth at the prospects for biometrics for identification, a subject that has recently had some of the shallow treatment that such things get from the television news.

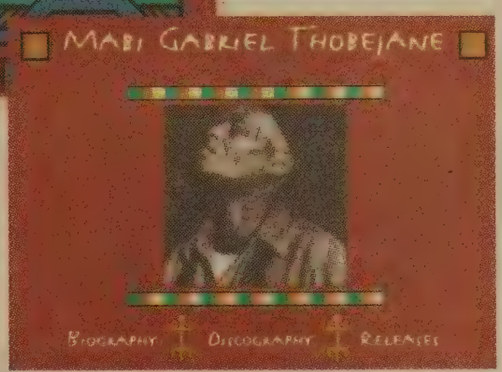
Having just covered so many of the Davis clan's activities and remembering in the process that Sylvia does PR, I now wonder if she wasn't just using reverse psychology when she called this a "dirty little gossip column."

Musical Energy Loud Truth

Readers with memories approximately equivalent of that well-known African animal, the elephant, may remember some words of recommendation that I wrote in our gift-giving guide for Xmas 1996 about the **Bootleg.net** series of live recordings, available only over the Internet, from several South African musicians along with a wider range of studio recordings from the **B&W** label. Those who do not have instant recall may go to *www.microtimes.com/158/mm101.html* to read them in their full glory along with what is now ready-made nostalgia for ***Wired***'s book-publishing operation.

Since then, the African music business being what it is, like the rest of the music business and about as reliable and consistent as the Internet, things have changed slightly. **Robert Trunz**, producer of the recordings, has left B&W (which is primarily a manufacturer of loudspeakers) to form **M.E.L.T.2000**, yes, that stands for Musical Energy and Loud Truth beyond 2000, a label dedicated to music from all over the place but with particular emphasis on South African artists, cross-cultural meetings, and the mix of ancient forms with today's electronics. He asked me to inform you of M.E.L.T.2000's new and enlarged Web site with whizzy multimedia features like video and QTVR at *www.melt2000.com* .

The two relatively recent M.E.L.T.2000 releases that I've actually heard, **Mabi Gabriel Thobejane**'s "Madiba" and **Vusi Khumalo**'s "Follow Your Heart," are



poles apart despite both artists being percussionists from South Africa. Khumalo follows his heart with a fairly uptempo American-influenced, jazzy-funky R&B sound albeit with some local South African flavor. Ironically, given Khumalo being a percussionist, the drums tend to be a bit overly programmed for my tastes but the horns are real and blaze away in excellent fashion. If you're in the mood for this kind of sound, it's well done and representative of this end of the spectrum of South Africa's many styles of music. Thobejane, on the other hand, takes us on a journey deep into more traditional and native South African rhythms and sounds with primarily acoustic instruments including vocal effects and the occasional twanging of the Jew harp. Being South African and recorded with some international guests such as **Byron Wallen** and **Max Lasser**, there are still some outside musical influences but they're considerably more muted than those of Khumalo's release.

Other M.E.L.T.2000 releases include new recordings from the mighty **Amampondo** and **Pops Mohamed** as well as the highly acclaimed **Achisa**, **Brice Wassy**, Byron Wallen, **John Tchicai**, Max Lasser, and **Flora Purim** as well as several compilations that serve to introduce M.E.L.T.2000's particular and unusual musical vision. The M.E.L.T.2000 site has more information about its releases than most record company sites and is well worth a look. M.E.L.T.2000 releases have been near impossible to find in the local stores because distribution has been lacking in the U. S. (although the earlier B&W releases can still be found). However, you can purchase all of the M.E.L.T.2000 releases direct from the site or, if you wait a few weeks until the new distribution deal with World Music Distribution kicks in, you'll be able to do the meatspace thing in almost any Bay Area record store.

World Music Distribution's own site is at *http://worldmusic.com* , a site that seems to always get me to go out and spend some money whenever I look at it. Suffice it to say that World Music imports a fine selection of music and also runs a domestic label, **Tinder**, that puts out some worthy and interesting releases culled from other labels around the world. Until the Internet can really deliver CD-quality audio to any room of your house, getting music of this high-quality to your ears means getting your hands on these physical artifacts.

Internet Versus Immortality

Try as I might, I've been unable to forget or ignore this little observation. It's just too delicious to let pass into the vanishing swirl of unrecorded events. Every year, UC Berkeley presents a series of lectures on a variety of subjects that are open to the public. This year, **Robert W. Lucky**, Corporate Vice President of Applied Research at Bell Communications Research, gave a couple of lectures about the Internet for the Charles M. and Martha Hitchcock Lectures; one entitled "Failed Visions and Unexpected Adaptations," the other, "How Will We Connect?" Meanwhile, on the other side of campus, **Robert Nozick**, Professor of Philosophy at Harvard University and author of several books, lectured on "The Place of Consciousness," for the Foerster Lecture on the Immortality of the Soul.

In this year, the year of all things Internet, guess which lecture attracted something like three times as many attendees as the *continued on page 168*

Your #1 Source For Nobody Beats

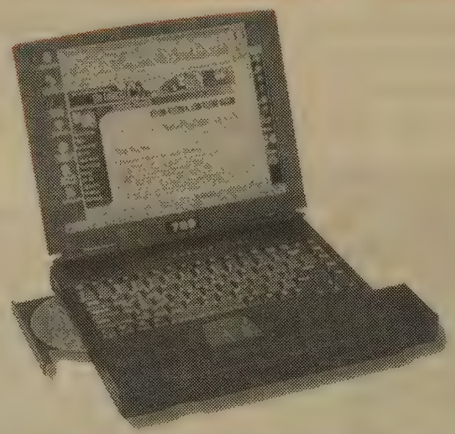
Visit Us On the Web
www.hitron.com

High Performance All-In-One Chembook 3300

- Intel 430TX Chip
- 256K L2 Cache
- 64-Bit PCI 2MB Video
- Ram up to 96MB
- 1 USB port
- 3D Sound System
- 2 Type II or 1 Type III PCMCIA
- Support Cardbus & Zoomed Video
- Internal Modem Option Available

DISPLAY	CPU TYPE	2.0GB	3.0GB	4.0GB
12.1" TFT 32MB RAM 20X CD 1.44 FDD 94WH Battery	P200 MMX	$1449	$1469	$1629
	P233 MMX	$1479	$1499	$1659

Powerfull P-II Maxtech 759 Notebook



- 512K Cache
- 4MB PCI 3D Video
- Video In & Out Capture
- Lithium (3.5hp) Battery
- 3D Full Duplex Stereo Audio w.1MB Wavetable
- Support Cardbus & Zoomed Video2 USAf Ports
- 2 Type II or 1 Type III PCMCIA
- 3.5" Smart Bay (can install FDD, Zip, 2nd HDD or DVD POM)
- Internal Modem Available

DISPLAY	CPU TYPE	3.0GB	4.0GB	5.0GB
12.1" TFT 24X CD R/W 32MB SDRAM Upgradable to 256MB 56K Modem	233 MMX	$2349	$2499	$2689
	Tillamook 233MMX	$2659	$2839	$3019
	Tillamook 266MMX	$2809	$2939	$3119
	PII Deschute 266	$3119	$3249	$3429

12.1" TFT Active Color Screen .....add $350

Super Fast Pentium® II System

- Intel 440LX Chip Pentium® II Motherboard
- 32MB SDRAM
- 1.44MB Floppy Drive
- 3.2GB Hard Disk
- Matrox Millennium w/4MB Display (PCI/AGP)
- ATX Mid Tower Case w/235W P.S
- 104 Win 95 Keyboard
- 24X CD-ROM
- Logitech Mouse
- 16-Bit Sound Card
- 60W Speakers
- 56K Fax Modem w/Voice

CALL FOR CUSTOM CONFIGURATIONS

Pentium® II 233 System $999
Pentium® II 266 System $1050
Pentium® II 300 System $1197
Pentium® II 333 System $1345
Pentium® II 350 System $1545
Pentium® II 400 System $1776

Hitron Basic Enhanced System

- ASUS Pentium® Motherboard/512K
- 32MB RAM
- 1.44MB Floppy
- 2GB Hard Disk
- On-Board 2MB Video
- Mid-Tower Case 2.250W P.S
- 104 Win 95 Keyboard
- Mouse
- 16X CD-ROM

FREE Lifetime Labor Warranty! Call For Details!

Pentium® 233MMX $559
AMD K6-233/266 ..... $499/579
Cyrix MII-200 ..... $467
Cyrix MII-233 ..... $493

Networking Services

- Lantastic
- Novell
- CNE On Staff
- Hardware & Software Installation
- Design
- Free Consultation

408.261.2695
408.261.2698 Fax

- 1-Year Parts Warranty/ 3-Year Labor for Notebook
- Lifetime Labor & Tech Support for Systems
- Nationwide On-Site Service Available
- Corporate PO's Welcome
- Corporate Leasing Available

• All Special Order Items Non-Refundable • Prices Subject to Change W/O Notice • Not Responsible for Typos • Prices Reflect Cash Discount •

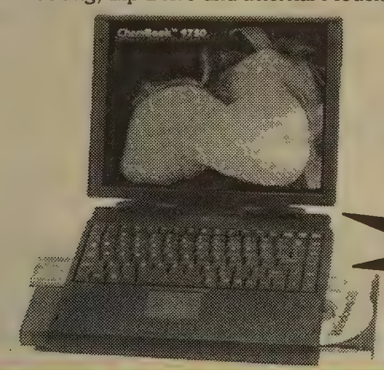
NOTEBOOKS SINCE 1990
OUR PRICES!

Best Seller Chembook 9780/9780M

- Upgradable to PII CPU (9780M) Intel 430TX Chip
- 512K L2 Cache
- 64-Bit 4MB pCI Video
- Video Capture Built-In
- RAM up to 128MB
- 3D Surround Sound System
- 2 Type II or 1 Type III PCMCIA
- 2 USB Ports
- Hot Docking, Zip Drive and Internal Modem Available

DISPLAY	CPU TYPE	3.0GB	4.0GB	5.0GB
12.1 TFT 16MB/20XCD 1 Lithium Battery	P233 MMX	$1659	$1789	$1999
	Tillamook 233	$2049	$2179	$2389
	Tillamook 266	$2149	$2269	$2479
	P-II Deschute 266	$2529	$2939	$2699
	AMD K6 233	$1559	$1699	$1909
	AMD K6 266	$1649	$1769	$1989

14.1" TFT + Lithium Battery . . . . . .add $630



13.3"

Monthy Blow-Out Special
Chicony 975/Chembook 9750

- 13.3" TFT XGA LCD • 20X CD-ROM • 512K L2 Cache
- RAM up to 80MB • 1.44FDD
- 2 Type II or 1 Type III PCMCIA Slot • 3D Stereo Sound System
- Lithium Battery • 2MB PCI Video

CPU TYPE	2.0GB	3.0GB	4.0GB	5.0GB
P200 MMX	$1595	$1620	$1755	$2020
P233 MMX	$1640	$1685	$1820	$2095

CALL US NOW FOR NOTEBOOKS IN STOCK!
We've Got • Toshiba • NEC • Everex • AST • IBM • ACER • & Much More!

EVEREX
(Super slim & light)

1. **Stepnote SK Tillamook**
   P5-200MMX/32MB RAM/2.1GB
   HDD/20X CD 13.3TFT/Win 95 . . . . . **$2559**
2. **Stepnote SK Tillamook**
   P5-233MMX/32MB RAM/3.2GB
   HDD/20X CD 13.3TFT/Win 95 . . . . . **$2965**

FUJITSU

1. **Fujitsu 535TX**
   P133, 16MB, 2GB, 12.1"TFT **$1619**
2. **NEC 273CMT**
   P133, 16MB, 2GB, 12.1"TFT **$1739**

IBM

1. **ThinkPad 380E**
   P150MMX/2.1GB/16MB/NiHM
   12.1FRSTN/Win95 . . . . . **$1515**
2. **ThinkPad 380ED**
   P166MMX/2.1GB/16MB/NiHM
   12.1FRSTN/WIN95 . . . . . **$1650**
3. **ThinkPad 560E**
   P166MMX/16MB/2.1GB
   12.1TFT/Win95 . . . . . **$2150**
4. **ThinkPad 560X**
   P233MMX/32MB/4GB
   12.1TFT/Win95 . . . . . **$2995**
5. **ThinkPad 770**
   P233MMX/5GB/32MB/14.1TFT/33.6FM **$4950**
6. **Work Pad** **$295**

TOSHIBA

1. **Libretto-** 50CT P75 16/810 6.1" TFT $795
2. **Libretto-** 70CT P120 16/810 6.1" TFT $1699
3. **Libretto-** 100CT P166 32/2.1G 7.1" TFT $2499
4. **Satellite Pro**
   440CDT P133 16/1.4G/33.6FM $1675
4. **Satellite Pro** 480CDT P233MMX/4GB/32MB/
   12.1"TFT/10X CD/33.6FM $2250
5. **Tecra-740** CDT P166/3G 13.3"TFT/
   288F/Video Conference. $2550
6. **Tecra-750** CDM P233/32/4.7G /13.3"
   TFT/56K/Digital Camera. $4985
7. **Tecra-750** DVD P233/32/4.7G DVD 13.3"TFT/
   56K FM/4MB SGRAM $5199

COMPAQ

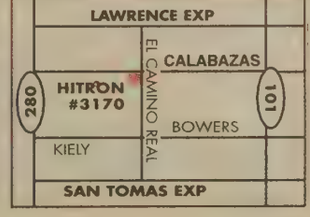
1. Compaq 1550DMT P133, 16MB, 1.4GB, 12.1"TFT $1670
2. Compaq 1560DM P166MMX, 16MB, 3.2GB, 12.1"DS $2280
3. Compaq 1592DMT P233, 32MB, 3.2GB, 12.1"TFT $3599
4. Compaq 4131T P133, 16MG, 1.4GB, 12.1"TFT $1245
5. Compaq 1220 P200MMX, 32MB, 2.1GB, 12.1"DST $1839
6. Compaq 1621 P233MMX, 32MB, 2.1GB, 12.1" Hpa . . . . . $CALL
7. Compaq 1622 P233MMX, 32MB, 2.1GB, 12.1" Hpa $2199
8. Compaq 1681 P233MMX, 48MB, 3.2GB, 12.1"TFT $2979

Hitron Systems

3170 El Camino Real • Santa Clara, CA 95051
(Between Lawrence Expressway and San Tomas Expressway)

408.261.2695 • 408.261.2698 (Fax)

Hours:
Monday - Friday: 9 - 6
Saturday: 10:30 - 4:30
E-Mail Sales: info@hitron.com



• 90 Days Same As Cash •

• All Special Order Items Non-Refundable • Prices Subject to Change W/O Notice • Not Responsible for Typos • Prices Reflect Cash Discount •

Quality Systems @ Low Prices

WINDOWS MAGAZINE W RECOMMENDED

"For overall performance, design and configuration, the *InfoGOLD* takes the GOLD."

EDITORS' AWARD

Monthly System Special

InfoGOLD Complete Multimedia system #4400

Intel Pentium MMX *200Mhz: $899* /233Mhz MMX: *$949*

- 512K Pipeline CACHE
- 32MB HIGH SPEED EDO RAM
- ASUS SYSTEMBOARD/ INTEL CHIPSET
- PCI LOCAL BUS, FLASH PnP BIOS
- 1.44MB TEAC FLOPPY DRIVE
- CPU HEATSINK WITH COOLING FAN
- PCI ATI 3D VIDEO CARD W/ 2MB RAM MPEG
- 3.2 GB QUANTUM HARD DISK DRIVE
- 15" S-VGA IMPRESSION 5PLUS MONITOR
- 32X SPEED TOSHIBA CD-ROM DRIVE
- SOUNDBLASTER SOUND CARD & AMP. STEREO SPEAKERS
- CUSTOM MID SIZE TOWER CASE WITH FANS
- CPU COOLING FAN WITH HEATSINK
- 104 WIN'95 ENHANCED KEYBOARD
- LOGITECH SERIAL MOUSE

InfoGOLD Business Workstation

With Intel Pentium II 233Mhz MMX CPU: $1,349

With Intel Pentium II 266Mhz MMX CPU: $1,449

- 32MB DIMM HIGH SPEED RAM
- 6.4GB HARD DISK DRIVE
- 4MB ATI VIDEO CARD 3D MPEG
- 32X Speed CD-ROM DRIVE
- 1.44MB FLOPPY DRIVE
- 104 WIN'95 PS/2 KEYBOARD
- ULTRA ATA DMA/33 ON-BOARD
- 15" S-VGA TRINITRON .25DPI MONITOR
- 2 USB PORTS, 2 PS/2, 2 SERIAL, 1PRLL
- SOUNBLASTER SOUND CARD
- AMPLIFIED STEREO SPEAKERS
- CUSTOM MID TOWER ATX WITH FANS
- MICROSOFT ERGO INTELLI PS/2 MOUSE
- CPU COOLING FAN WITH HEATSINK

Chembook Notebook Special $1,995

Model 9780 With Intel Pentium 200Mhz MMX CPU

- 12.1" TFT ACTIVE MATRIX COLOR DISPLAY
- 16MB EDO RAM, UPGRD. TO 128MB
- 4MB VIDEO RAM, MPEG
- 20x Speed CD ROM DRIVE
- 1.44MB FLOPPY DRIVE (REMOVABLE)
- DETACHABLE WIN'95 KEYBOARD
- BUILT-IN STEREO SOUND & SPEAKERS
- BUILT-IN MICROPHONE
- 2.1GB HARD DISK DRIVE
- FAST IrDA (InfraRed) PORT
- TWO PCMCIA TYPE II, III
- MICROSOFT WINDOWS 95
- FREE LEATHER CARRY CASE
- LITHIUM-ION BATTERY
- VIDEO IN AND VIDEO OUT
- OPTIONAL 33.6K FAX MODEM

Hewlett Packard Printer Specials

HP692C Inkjet Color With Photo Cartridge: $245.
HP720C Inkjet Color With Photo Cartridge: $295.
All other models are available at Great prices!

Award winning InfoGOLD NT Servers with Intel Pentium II Processors custom configured!

InfoGOLD
American Multisystems
1830 Houret Ct
Milpitas CA 95035

INTERNET: www.infogold.com
e-mail: infogold@infogold.com
CALL : 408.945.2296
FAX : 408.945.2299

Pentium is a trademark of Intel Corporation. Other Trademarks are property of their respective owners. Prices subject to change without notice. Not responsible for typos.

continued from page 165

other two? To my surprise, it was Nozick's lecture on the relatively timeless questions of metaphysical and philosophical concerns rather than Lucky's extremely amusing and practical considerations of what's what with the newly proclaimed wonder of our time.

Interpretations of what this means could surely vary widely, but it seems to me that perhaps the computer and media industries somewhat overrate the general level of interest in themselves while downplaying the more widespread hunger for spiritual nourishment and attempted explanation of what it's really all about. Lucky's litany of failed visions from the omphalosceptic industries, picturephones and videotelephony, home information systems and videotext, video on demand and interactive television, was a sobering parade of technological inventions that have not—at least yet—found their places in the public marketplace. He offered a cautionary note about the future commercial viability of the Web as medium of mass communication, pointing out that much of its success so far can be attributed to the fact that it's basically free and that as yet no significant sector of any industry seems ready to pay for high bandwidth to the home.

Summitry Correction & Extension

Peter Dewees, Dean of the College of Extended Learning and administrative overlord of the Multimedia Studies Program, at SFSU, writes to correct some obscurred points in this column's March 25 opinion of the Multimedia Summit (you may refresh your memory of it at *www.microtimes.com/177/gossip.html*):

"1. The multimedia summit was not held at SFSU's Multimedia Studies Program.

"2. International Day, preceding the summit by one day and sponsored by NTT Multimedia Business Department, was held at SFSU's Downtown Center on Thursday, 2/26/98. The downtown center houses ten education and training programs, as well as multimedia studies, which is the largest.

"3. The summit itself was held at the Yerba Buena Forum and Center for the Arts on 2/27/98."

He is, of course, absolutely correct on these questions of schedule and location and we at *MicroTimes* knew these things and regret the confusion. Unfortunately, the process of pummeling words into shape for the space available on the page caused some of them to disappear from sight.

Dewees also points out that, although "we have had a tough time breaking even in our multimedia program, because it is so dependent on both the latest technology (five labs full) and on relatively high levels of staff support, and because our fees are often barriers (we also lack sufficient financial aid)," the situation "has improved dramatically this fiscal year. We are entirely self supporting—no State budget tax dollars."

My reply included my observation that "the problems of the industry and the problems you face seem to me to be linked. I believe strongly that some 'visionaries' are delusional and have lead us all to a place where there are no easy answers. Meanwhile, they have new delusions that we're asked to once again put faith in. The MSP seems to me to be as much victim as anything else." Dewees emailed back, "I certainly agree with your comments. Particularly the one that has come back to bite us more than once—the delusional visionary theme. Hate to admit it, but some of us here did not use the healthy skepticism that ordinarily serves us well."

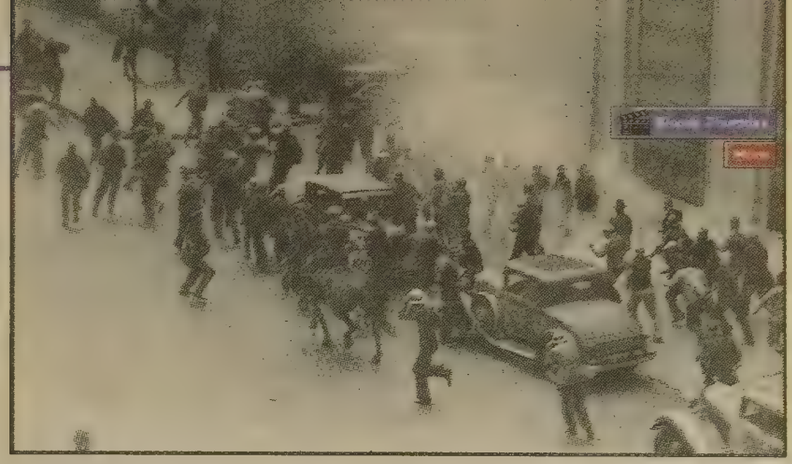
So, for any of you experiencing a shortage of healthy skepticism, pay attention to Dewees' words and remember that I've usually got some to spare. Email me, *jeve@well.com* , for a fresh supply and occasionally I may even be able to come up with some unhealthy skepticism if that's your thing. ◆

Copyright © 1998 by Jonathan E. All rights reserved.

History Is A Mess!

Shaping San Francisco With Non-Linear Storytelling

By Jonathan E.



Over a hundred striking workers were wounded and two were killed on Bloody Thursday, July 5, 1934. Labor is just one aspect of San Francisco's history chronicled in the CD-ROM *Shaping San Francisco*.

Shaping San Francisco concentrates on the history of San Francisco that the Chamber of Commerce and other practitioners of the official romantification of San Francisco legend tend to ignore.

"If I knew I would have to spend $70,000 and four years of my life doing this, I never would have done it," Chris Carlsson reveals as he discusses his latest project, the *Shaping San Francisco* CD-ROM and community history kiosk.

We can be thankful that he didn't know what would be involved, because *Shaping San Francisco* is turning out to be a fascinating use of multimedia—both to foster community participation in historical research and to present the results of that research. It's also a valuable reminder of just how difficult and expensive it can be to design and produce quality content-driven, non-linear multimedia. The only reason *Shaping San Francisco* has cost as little as $70,000 is that almost all the labor—about 15,000 hours worth—was volunteer, while much of the difficulty was caused by the inadequate choice of software tools available in November 1994 when Carlsson had to decide what to use and what platform the project would appear on.

In brief, *Shaping San Francisco* is a collection of photographs, writings, vintage film clips, newly recorded video interviews, and a variety of audio embellishments, both historically original and recreated, concerned with the history of San Francisco. It's built on a Paradox database, so it is designed to be readily searchable, with an Asymetrix Multimedia Toolbook front end.

Currently, it comes in two forms: a CD-ROM for individual home consumption and a kiosk version intended to be constantly updated and added to, which will be located in public places such as libraries, community centers, bookstores, or student union buildings. While it's not an income-producing "product," Carlsson emphasizes the social importance of the kiosk version as a tool to stimulate authentic interactivity, which he defines as "you and me talking, and anybody talking to anybody else, because there's the infinite possibilities that might exist between human beings."

In addition to this digital work, there's an associated book, *Reclaiming San Francisco*, that provided some written material to the digital content but, more importantly conceptually, also provided "some fresh thinking, some fresh ideas, and some extra depth of content."

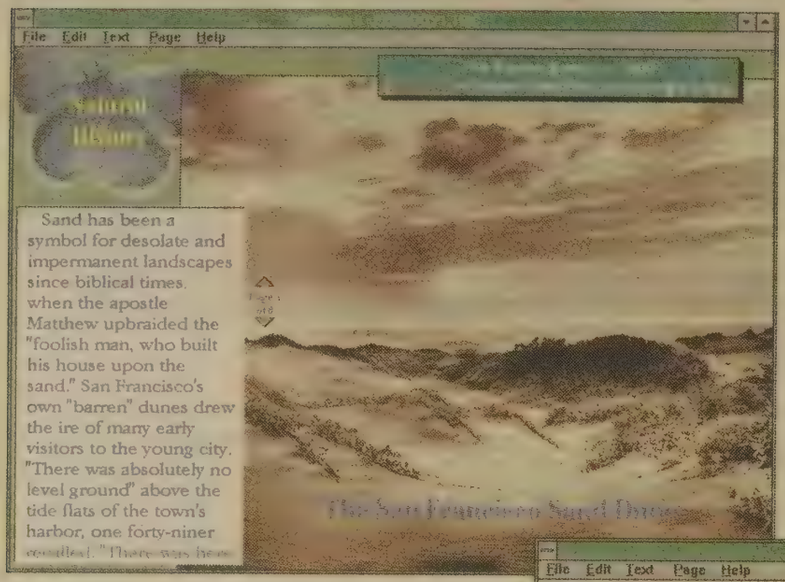
Alternative History

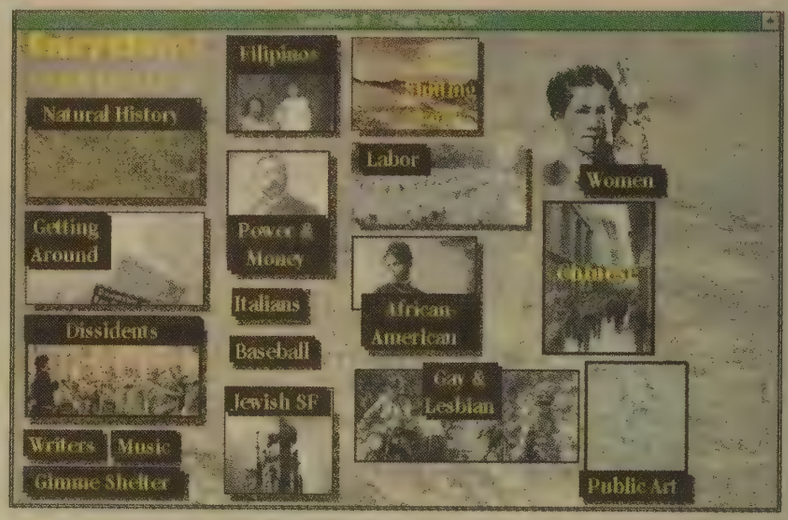
It's helpful, when attempting to grasp the intent of this invigorating approach to San Francisco's history, to have some understanding of Carlsson's own role in aspects of the city's recent history.

Simply put, he's a long-time creative agitator stimulating reaction to what William S. Burroughs called "the US drag." Along with his two primary comrades in the production of *Shaping San Francisco*, Jim Swanson and Greg Williamson, he was a founding member of the collective that produced, for thirteen years, *Processed World*, a 'zine-style look at the world of temp and corporate work from the underside. Along with Swanson, he was an original collaborator in starting Critical Mass, the monthly bicyclists' assertion of their vehicular rights against the domination of the automobile that has now spread to cities around the world (although continuing to be viciously stomped on by San Francisco's current mayor).

Among his lesser known exploits are the Union Of Concerned Commies, a street theater group active in the Financial District in the early 1980s, and the Anti-Economy League of San Francisco, an attempt to warn the newly capitalist nations of eastern Europe about the rigors of the free market that lay before them in the early 1990s. He also worked for Community Memory, one of the first efforts to provide the personal computer business with a socially relevant role.

Given Carlsson's interests, it's probably not surprising that *Shaping San Francisco* concentrates on the history of San Francisco that the Chamber of Commerce and other practitioners of the official romantification of San Francisco legend tend to ignore: radical and working-class struggles for unions; gay rights; the revolt against the freeways; the wholesale destruction of immigrant and bohemian communities by downtown interests; the assassination of Harvey Milk and George Moscone; Food Not Bombs; jazz in the


File Edit Text Page Help
Natural History
Sand has been a symbol for desolate and impermanent landscapes since biblical times, when the apostle Matthew upbraided the "foolish man, who built his house upon the sand." San Francisco's own "barren" dunes drew the ire of many early visitors to the young city. "There was absolutely no level ground" above the tide flats of the town's harbor, one forty-niner complained. "There was here



Shaping San Francisco's subject matter ranges from one waterfront to the other and crosses ethnic community lines. Photographs of turn-of-the-century landscapes and street scenes from all periods of San Francisco's past provide fascinating views of a quieter, less crowded time giving way to today's hustle and bustle.

1940s; the punk scene in the late 1970s; the Kommotion multimedia art collective; the environmental issues behind the filling in of the Bay and the paving over of the land; the damming of Hetch Hetchy despite the protests of John Muir. It's a rich and vibrant history that was once a big part of San Francisco's allure.

Unfortunately, the knowledge of that history has been steadily eroded, not only by the usual passage of time and the arrival of a new generation, but by a deliberate effort of what's called civic pride. Not only has that knowledge faded but much of San Francisco's progress is in danger of being reversed; for example, there are new political pressure groups attempting to rebuild the freeway system, although only those freeways that lead to their neighborhoods, rather than constructing any within their own communities.

Politically, the US as a whole has become a corporate oligarchy fronting as a NIMBY bourgeois dictatorship. Once San Francisco stood against the mainstream political madness of the US. Among many other possible examples: the first protests against the House Un-American Activities Committee erupted here; San Francisco hosted some of the most vocal protests against the Gulf War; much of the environmental movement originated in the Bay Area. Of course, most of these demonstrations of public spirit came from the streets rather than from the civic elite.

Over the years under relentless economic pressure and internal political chicanery, San Francisco has sadly redeveloped itself into a town that is rapidly becoming just like any other town in the United States, dictated to by corporate concerns and full of retail chains, rather than the proudly individualistic city it once was.

Redevelopment Of Amnesia

Of course, cities do get worn out and parts of them need to be replaced, just like corrupt politicians.

But it's not a good idea for such decisions to be dictated by purely big-business concerns. Uprooting thriving, but usually minority, communities and then leaving a big hole in the ground for years while corporate property developers find the money they need to finish the job (meanwhile extorting more favorable concessions from the city) is inelegant, unjust, and all too frequently the way redevelopment works, in San Francisco and other cities. San Francisco, however, is a little unusual in that historically there has been protest against such schemes, and some of the affected communities have even managed to organize themselves well enough to win some compensation for losing their homes.

This is part of the story that *Shaping San Francisco* tells, but Carlsson has more ambitions than simply relating a tale—albeit a tale that needs uncovering, even excavating, from the thick debris of official propaganda about the benefits of redevelopment and civic progress.

Carlsson readily admits that there's more than one side to the story, to almost any story. In fact, he feels that one of the great benefits of non-linear presentation of historical material, as made possible by digital interactive media, is that it produces a new way of making different viewpoints visible. He explains, "I think that there are certain types of topics that really lend themselves to the new form of non-linear media, and I suspect that social history is one of the best, because it is so boundary-less. Shared social history wants to be using this form because it doesn't privilege any one voice or any one narrative over any of the other ones. They all have more or less an equal importance.

"You, as the user or the reader, essentially give it a certain amount of importance as you make the choices that matter to you and you find out what you want to know. That's a kind of a flip of the normal narrative process, particularly in history which traditionally has been a grand narrative told by one authoritative voice who's got all the answers."

With *Shaping San Francisco* he hopes to combat what he calls the amnesia of our culture, "a culture that is very insistent on seeing everything in terms of the new and the now. The future is this kind of weird thing that's just informing the

present all the time, but there's almost nothing of the past except in so far as it can be made into this heritage industry with these quaint little things that help you buy more stuff."

Carlsson believes that the non-linear architecture of *Shaping San Francisco* enables greater understanding of how a series of choices have produced the cityscape of today. He continues, "Our idea is that, 'No! Actually history is important, it is an artifact of the present. It is something that we do today to understand how we got like this.' But that's rarely how it's framed. So we're trying to reframe some of our fundamental consciousness so that we reconnect to the past that made the world that we live in today. Being able to do that is a complicated process. It's not like there's one way to do it or one answer or one particular frame of reference. Hence, this media form lends itself quite well to a sweeping portrayal of all sorts of different causal elements."

Becoming more specific, he elaborates, "The real question we're trying to ask here is, 'How did it get like this?' It's not like there's only one possible way for life to be, and yet that is what most of us assume." He then explains how our daily routines and need to take care of immediate survival, particulary economic, "really narrow our sense of the world around us and our own ability to take action in it."

Carlsson's aim is for *Shaping San Francisco* to help individuals "realize that there are all these moments of contestation, there's all these points of decision making, of choice." Part of his message is that in the past, generally up to about ten or fifteen years ago in the United States, that these decision points were usually faced collectively as opposed to individually. Carlsson takes particular aim at the invasion of the private automobile into public space and the subsequent loss of reliable public transport and the opportunities for face-to-face communication that it afforded, pointing out that this stimulated social and political action.

While the tide has turned against radical politics, he claims, "*Shaping San Francisco* is littered with those kind of examples about how this city got to be like this. If this thing works, it gets people to reconnect to sort of a self-conscious presentation of history as opposed to this 'objective history' that everybody accepts as factual. The more you look at history the less factual it seems."

The Shape Of *Shaping San Francisco*

Paging through *Shaping San Francisco* is an absorbing experience reminding one in a vivid and emotional way of what a particular and unique city San Francisco has been at times. Due to its content alone, it is one of the most impressive and continually intriguing CD-ROMs ever produced. It already contains a massive amount of historical information and, in combination with the kiosk version, is ever expanding. Future plans call for there to be periodic pressings of new "frozen" versions, probably on DVD rather than CD-ROM.

The downside of all this ambition, the low-budget volunteer method, and the restricted abilities of off-the-shelf software is that there are some loose ends and frankly raggedy production. The information architecture could use some shoring up, although the structure of the project eventually becomes more recognizable. Not everything is entered into the database correctly.

It is not yet a fully implemented tool for researching San Francisco's history, although that is one of its eventual aims. For now, it works in a more serendipitous way. Perhaps this is appropriate to its grassroots orientation (did street-level politics ever run smoothly?) and it's not entirely without charm in a sort of funky, retro way; but occasionally, such as when text is obscured by graphics, or locations of events are wrongly identified, its flaws get in the way of what it's trying to do. However, do not let that stop you from checking it out for yourself. *Shaping San Francisco* is truly a magnificent achievement and deserves support both from individuals and civic-minded organizations.

Besides its impressive content, one of the handy features is the library tool's meter that tells you how much of each subject you've seen. This is a concept that was first proposed by Stewart Brand almost ten years ago in the postmortem of the *Electronic Whole Earth Catalog*, but has never—until now—been implemented in any other title that I've seen. Another particular point of interest are the photographs that blend the landscape from as it was to as it is now.

How To Shape San Francisco

Carlson not only knows that there is still work to do, he's planning for it, explaining, "What we really think is that we finally got to the beginning here. *Shaping San Francisco* is about making a delivery mechanism for people to tell their own stories. It was not about being a business, creating a commodity and selling it. That's just an unfortunate thing that we have to sort of pretend that we have to do.

"We hope it's the beginning of a new social process. Will other people actually feel inspired that this is a meaningful way for them to communicate their own sense of history and their sense of their own life's experiences through this mechanism to a larger public? That's a very curious question. It's a different media metaphor that no one's ever tried before.

"We have to find a new voice, a new style, a new form. That's what we were self-consciously groping for in *Shaping San Francisco*, a new way to communicate, a new way to share information and present things. Our political mission was how can we get radical politics into this stuff before it's completely prohibitively expensive and out of the question. I think we just barely scraped through because, as it is, it's too expensive for us."

In many ways *Shaping San Francisco* is an attempt to make good on some of the promises of multimedia that were so exciting five years ago. We all know that most of those promises have been ditched, at least temporarily, in favor of making Web sites to further corporations' marketing efforts. Well, everyone has to pay their bills. Obviously, what *Shaping San Francisco* needs is support from individuals, institutions, or even business interests with a conscience. Perhaps the City of San Francisco could find something in its budget to help in preserving a side of its history that is in danger of being lost—or is there only official history as we head into a new millenium?

To contact *Shaping San Francisco*, either with financial help or to discuss historical material that you wish preserved, write to: *Shaping San Francisco*, 1095 Market St., Ste. 210, San Francisco, CA 94103; call (415)625-2060; send email to *cloverleaf@shapingsf.org* ; or check the Web site at *www.shapingsf.org* . Equipment from manufacturers of multimedia projectors or laptops would be particularly welcome, and eventually touch screens for future kiosks will also be needed. *Shaping San Francisco* is a project of the Bay Area Center for Art & Technology, a California 501(c)3 nonprofit corporation. All donations are tax deductible.

The kiosk is currently on display at Modern Times Bookstore at 888 Valencia St., San Francisco. It will be at the Main Library on the sixth floor outside the History Room in late May through July. ◆

Copyright © 1998 by Jonathan E. All rights reserved.

Resources:

Shaping San Francisco CD-ROM $35
Windows only from:
Shaping San Francisco
1095 Market St., #210
San Francisco, CA 94103
(415)625-2060

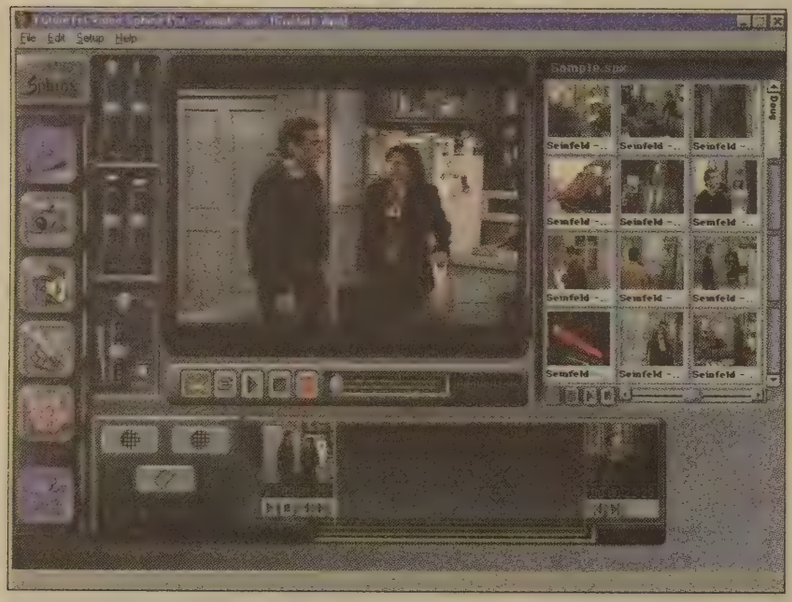
Reclaiming San Francisco book $17.95
published by City Lights
available by mail from:
Shaping San Francisco
Both CD-ROM and book for $50
Please add $5 shipping and 8.5% sales tax for California residents.

Video Sphinx Pro

Capturing Motion On Your PC

By Douglas J. Nakakihara

Video Sphinx Pro is a tremendous product with only a few minor rough edges in the software. It's hard to believe that they can get all the necessary bandwidth out of the parallel port, but they do.



The FutureTel's Video Sphinx Pro is a real-time MPEG-1 video capture device that attaches to the parallel port of your Windows 95 PC. It's a pretty hefty device with S-video (Y/C), composite video and stereo audio inputs, plus pass-through outputs for monitoring. Included is a nice three-foot, 25-pin extension cable, so the 6" device does not have to sit right off the back of your computer.

I found installation easy; the only thing I had to do was change my computer's parallel port mode to ECP. (This setting did not seem to have a detrimental effect on my ZIP drive or printer, by the way.)

I have a parallel port ZIP drive and had the Video Sphinx Pro daisy-chained off of it. Apparently there is some type of conflict, and the ZIP is not usable once you have run the Video Sphinx Pro application—even after shutting the application down. The only solution is to reboot.

Capturing Video

Your video source can be a VCR, camcorder, TV, laserdisc, DVD or anything else with a video/audio output. There's no need for a time-base correction device, sometimes needed to digitize video. You just plug the video source directly into the Video Sphinx Pro.

Capturing a movie is nearly as simple as operating a VCR, but before you begin to actually digitize, you must set the capture parameters, like what size you want the resulting video clip to be. The available NTSC sizes are 352 x 240, 320 x 240, 176 x 112, and 160 x 112. (Note: PAL modes are also supported.) You can also adjust the amount of compression. At the highest resolution, you can set the compression anywhere from 7.15MB/minute to 21.46MB/minute. At the lowest resolution, the range is 1.43MB/minute to 10.73MB/minute. The frame rate is the NTSC standard 29.97fps (25fps for PAL).

This is not a full-frame video capture device, which would require a resolution of at least 640 x 480. The Video Sphinx Pro was designed for multimedia applications, like CD-ROM and the Web, so the smaller resolutions are appropriate. However, the vertical resolution of the smaller settings (112) is a bit puzzling. 160 x 120 is pretty much the standard and since it does 320 x 240, it would seem that exactly half of it would make more sense. Oh well, guess I won't miss the eight pixels.

Compression

The amount of compression has two implications: the amount of streaming data that must pass through your system (the data-rate) and the amount of storage required to save the resulting file.

My test system was a 166MHz Pentium machine with 64MB of RAM and a 2GB hard drive—hardly an earth-shattering setup. The minimum system requirements are a 100MHz Pentium with 16MB of RAM, but 200MHz is recommended. My system was right in the middle, but seemed to handle everything I threw at the Video Sphinx Pro, even using settings requiring the maximum data-rate. (Note: You'll also need about 50MB of free drive space to install the software.)

Audio Settings

For audio, you have several options. The highest quality is 16-bit stereo 48KHz (i.e., Digital Audio Tape), requiring 384kbps; the lowest is mono 32KHz, requiring 32kbps. You will note that audio, even using the DAT setting, is much less demanding than video. Of course, it seems unlikely that you'd really need anything more than the CD-quality audio setting, which is 16-bit stereo 44.1KHz (224kbps). You can also elect to not capture audio (i.e., video only) or only capture audio.

Based on your settings, the capture settings dialog box graphically displays the video and audio

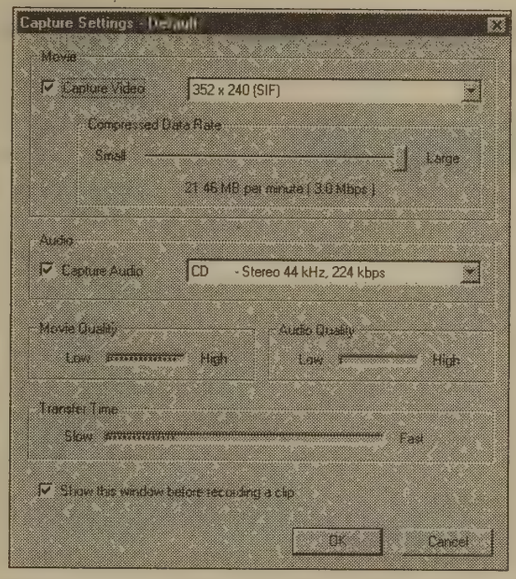
quality you will be getting. It also shows the transfer time, which is essentially the data-rate requirement.

Recording

To actually see what you're recording, you'll need to hook your TV (or video monitor) to the pass-through connections. (Note: This requires a composite signal input, even if you are digitizing from the S-video input.) You then simply start the video source and click the record button. Actually, you must click the Preview button first. After you click it, you have the option of displaying the capture settings dialog. Then, the program must do a bit of internal pre-processing before you can actually press record. This procedure is a bit awkward (i.e., un-VCR-like), but you get used to it.

Once the movie has been recorded, you can play it back and see if it was recorded acceptably. To save the video you simply drag it to the "album" drawer—a drawer that graphically slides out of the side of the main monitor window. In fact, most of the interface has a non-standard 3D-look (ala Kai's Soap), which I find to be more eye candy and not always optimally functional.

It is best to record your video with a "head and tail," that is, add extra time to the beginning and end, which can be trimmed off later. The trim window is also easy to use and very straightforward. You simply select the movie you want to edit and graphically set the in and out points. Thumbnails of the in and out point frames appear in small windows. Then, you simply execute the trim function to create the edited clip.



MPEG is a "delta" compression scheme. That means that most frames only contain the delta (i.e., difference) from another frame. Some frames, however, do contain a full frame of information. The result of all this is that there's a short pause whenever you are, say, dragging a slider to find a certain point in your movie—you can forget about visually shuttling through a clip. Because most frames are dependent on the information from other frames, they must be calculated to be displayed individually. This can be a little annoying when you are trying to set the in and out points; however, I would assume that using a faster machine would probably make things snappier.

You are suppose to be able to find a frame in the main window and then set the in or out point to that frame. However, this feature never worked properly for me. This is important, since the monitor window image is much larger than the in/out point thumbnails. I think an audio "scrub" feature would be invaluable here, since audio often determines where your in and out points are going to be. As it stands now, you must do a lot of trial and error to find the right in and out points.

Your Bar Code Automation Solution Specialist

Since 1986 Variant Microsystems has been the leader in bar-code decoders, scanners, and data collection solutions. We offer you expert consultation, installation, service and support on all systems. Our product line includes hand-held, fixed-mount scanners, bar-code printers, RF systems.

FREE TECHNICAL SUPPORT!
Dealer, VAR, and Corporate Inquiries Welcome

70-16171-01

CCD SCANNERS
We carry major manufacturers including:
Opticon
Welch Allyn • Unitech
VM5125 List $395
$149

LASER SCANNERS
Our solutions include, hand held, fixed mount, raster by:
Symbol • PSC
Percon • Welch Allyn
Metrologic • Microscan

BAR CODE PRINTING SOFTWARE
Powerful, easy-to use Windows software. Design & print bard code labels, Windows 95 & NT compatible. Prints on all thermal laser, and dot matrix printers. Any Label, user friendly Windows based bar code printing software.

PORTABLE DATA COLLECTIORS
$395
Collect data remotely and upload into your PC. Well suited for inventory-control warehouse application, etc. Use with a built-in laser scanner, or CCD or wand. Works with Windows software. We provide soutions from:
Symbol • Percon • Unitech - PT-815 LIST $719

PRINTER SUPPLIES
Labels (Paper, Kimdura, Polyester, Kapton) & Ribbons for Various Applications.

PRINTER BAR CODE LABELS
Thermal, Transfer, Direct, Thermal Solutions from:
Zebra • Datamax
Eltron • C. Itoh • Comtec
T4 List $1995
$1595

Variant microsystems

800-827-4268
Phone: 510-440-2870
Fax: 510-440-2873
e-mail: sales@variantusa.com
Visit our Web Site:
www.variantusa.com
46520 Fremont Blvd. Suite 614, Fremont, CA 94538
Prices subject to change without notice. Not responsible for typographical errors.

www.siliconvalleysquare.com

SVS SILICON VALLEY SQUARE

COME VISIT US
• Website Design & Maintenance

408-278-9087 586 N. First Street, Suite 216, San Jose, CA 95112
mt@siliconvalleysquare.com

ICONIX...Your ultimate computing solution for your business.
COMPUTER SALES • UPGRADES • SERVICE

PENTIUM® II POWER STATION
• Pentium® II Intel® 440LX M/B
• 32MB SDRAM
• 4.3GB Ultra DMA HD
• 1.44MB Sony FD
• AGP 3D Video w/4MB
• 24X CD-ROM Drive
• Yamaha 3D Sound Card
• Yamaha YST-M7 Speakers
• 65K Rockwell Fax/Modem
• Microsoft PS/2 Mouse
• Medium ATX Tower Case
• Win 95 104-Key PS/2 Keyboard
• MS Win 95 w/CD & Manual
Pentium® II 266MHz $1275
Pentium® II 300MHz $1425

OFFICE WORKSTATION
• ASUS TX97 Motherboard w/512K
• 32MB SDRAM
• 4.3GB WD Ultra DMA HD
• 1.44MB Sony FD
• ATI 3D Xpress w/4MB Video
• Toshiba 24X CD-ROM Drive
• Sound Blaster AWE 64 Value
• Yamaha YST-M7 Speakers
• USR 56K Fax/Modem Sportster
• Iomega 100MB Zip Drive w/Tape
• Microsoft Mouse & Win 95 Keyboard
• Deluxe Medium-Tower Case
• MS Win 95 w/CD & Manual
Pentium® 200 MMX.....$1250
Pentium® 233 MMX.....$1325

PERFORMANCE SYSTEM
• Intel® Pentium® 430TX M/B w/512K
• 32MB EDO 60ns Memory
• 2.5GB Ultra DMA HD
• 1.44MB Sony FD
• Diamond Stealth w/2MB Video
• 24X CD-ROM Drive
• Sound Blaster 3D Compatible on Board
• 120W Stereo Speakers
• 56K Rockwell Fax/Modem
• Internet NetMouse or Logitech
• Win 95 104-Key Keyboard
• Medium AT Tower Case
• MS Win 95 OSR-2 w/Manual
Pentium® 200 MMX.....$785
Pentium® 233 MMX.....$850

UPGRADE SPECIALS!!! Installation Included:
• Pentium® II 266MHz + Fan, Intel® AL440LX M/B $599
• Pentium® 200 MMX + Fan, Intel® TX M/B w/512K $255

HOURS: M-F 10AM-6PM SAT 10AM-2PM
ICONIX COMPUTERS
4767 Lafayette Street #102
Santa Clara, CA 95054
Tel: 408.986.8327
Fax: 408.986.8328
E-Mail: icon@hypersurf.com

Data Publishing Nightmares?!?

If you have masses of computer data that need to be transformed into catalogs or directories, Electra can help you sleep better at night. With a complete range of pre-press services, we take the fear out of any project, no matter how complex.

- County voter rosters and indexes
- Paper company price books
- Organizational directories
- Sequential bar coding
- Educational testing company catalogs

In-house Programming and Design

Your Graphics Source

electra
Electra Typography
500 Howard Street, Suite 100
San Francisco, CA 94105
www.electratype.com
415-495-3730
Fax 495-3587
800-495-TYPE

Saving a trimmed file requires some processing, so depending on the length of the movie clip, it can take some time. If you consider that there is a lot of data to manipulate, the delay is understandable. However, I found that with relatively short movies, say around one minute, the processing time was minimal and not even an issue.

Capturing Stills

Primarily, you'll want to use the Video Sphinx Pro for motion video capture, but you can also digitize stills.

Capturing stills is similar to capturing video, except you can see a preview—but this only updates every couple of seconds. When you click record, the previewed images are saved as BMP files to a temporary area on your hard drive until you press stop. To get an image to your album folder, you must drag it there. (Warning: If you accidentally click the preview button after you have recorded some stills, they will all be deleted, except for any images you have dragged to an album folder.) There is also a "sharpen" filter available to clean up images.

When you drop an image on the album drawer, a dialog box appears letting you specify the filename, file format (JPEG, BMP, TIF, or PCX), and resolution. If you uncheck the "Save To Current Album" option, a file requester should appear, allowing you to save the file anywhere on your system. However, it never appears and the image is saved to the program's temporary directory.

MPEG is a "delta" compression scheme. That means that most frames only contain the delta (i.e., difference) from another frame. Because most frames are dependent on the information from other frames, they must be calculated to be displayed individually.

Note that although you can set the resolution of the saved file greater than the captured resolution, it might be a waste of disk space, since there is only so much information there. You are probably better off saving it at or near the captured resolution—which is not the default—and blowing it up later, if needed, in a paint program.

Input Adjustments

There are also adjustments to control hue (color), saturation, contrast, brightness, as well as audio balance and level. The online help indicates that these are post-digitizing controls; however, another part of the help file correctly describes them as pre-digitizing controls. A sorely missed feature is some type of audio level meters. There is absolutely no way to determine if audio is being recorded optimally.

Since there is no real-time preview when recording movies, these controls do not affect the pass-through signal. To see the effect of these controls, I found you can adjust the settings in the still image capture mode and then flip back to the video capture mode. However, because the update is not real-time, it will take a bit of patience to achieve just the right settings. Not helping the process is that fact that the interface's interaction with the mouse pointer is way off. Fortunately, these were only minor annoyances.

Albums

Video and audio clips and still images are all saved to user-defined "albums." Within each album are "folders," which correspond to actual subdirectories on your hard drive.

However, each folder can be located anywhere on your hard drive, which means the album file must store a "pointer" to the location of each folder (i.e., subdirectory). If you move folders around externally using, say,

Windows Explorer, you have to manually adjust the folders using add and remove functions. You cannot even delete an album thorough the interface. The program and online help also confusingly sometimes refer to albums as projects.

I would have preferred to have the album mirror the hierarchy on the hard drive so that the album was really a parent subdirectory with all of the folders being subdirectories of it.

Other Features

The ClipGlue function allows you to merge movies together and optionally use a different audio track. This works "as advertised," except you are supposed to be able to preview the effect before actually committing to the operation.

MediaShow is nothing more than a way to play back movies, audio, and stills in a slideshow-like fashion. There are no fades or layered effects, and there is an annoying—although slight—pause between events. Since an audio clip can't be played simultaneously with a video clip, it is unlikely you'd ever use one in MediaShow. You can drag and drop event icons to rearrange the show, but the update is so slow that you often make mistakes. With a name like MediaShow, I was expecting much more.

Online Docs

All of the documentation is online, except for the installation information. The online help also features informative little movies on important procedures.

Generally, I don't like only having electronic-based documentation. Its inherent nonlinear nature just seems more difficult to comfortably navigate the documentation and learn the product. However, Video Sphinx Pro was very easy to use and after a few sessions, you won't need to refer to the online documentation very often.

Using Clips

To view MPEG video clips you need a PC with Microsoft ActiveMovie installed (or other MPEG decoding software). For Macintoshes, QuickTime now supports MPEG. You can use these MPEG clips for email with video attachments or for links on Web pages.

Of course, as with all Internet files, consider their size before using.

I do wish FutureTel had included some type of utility that would convert the clips into the more universal AVI or QT formats. (According to FutureTel's Web page, their MPEGTools product is suppose to be able to convert to AVI.)

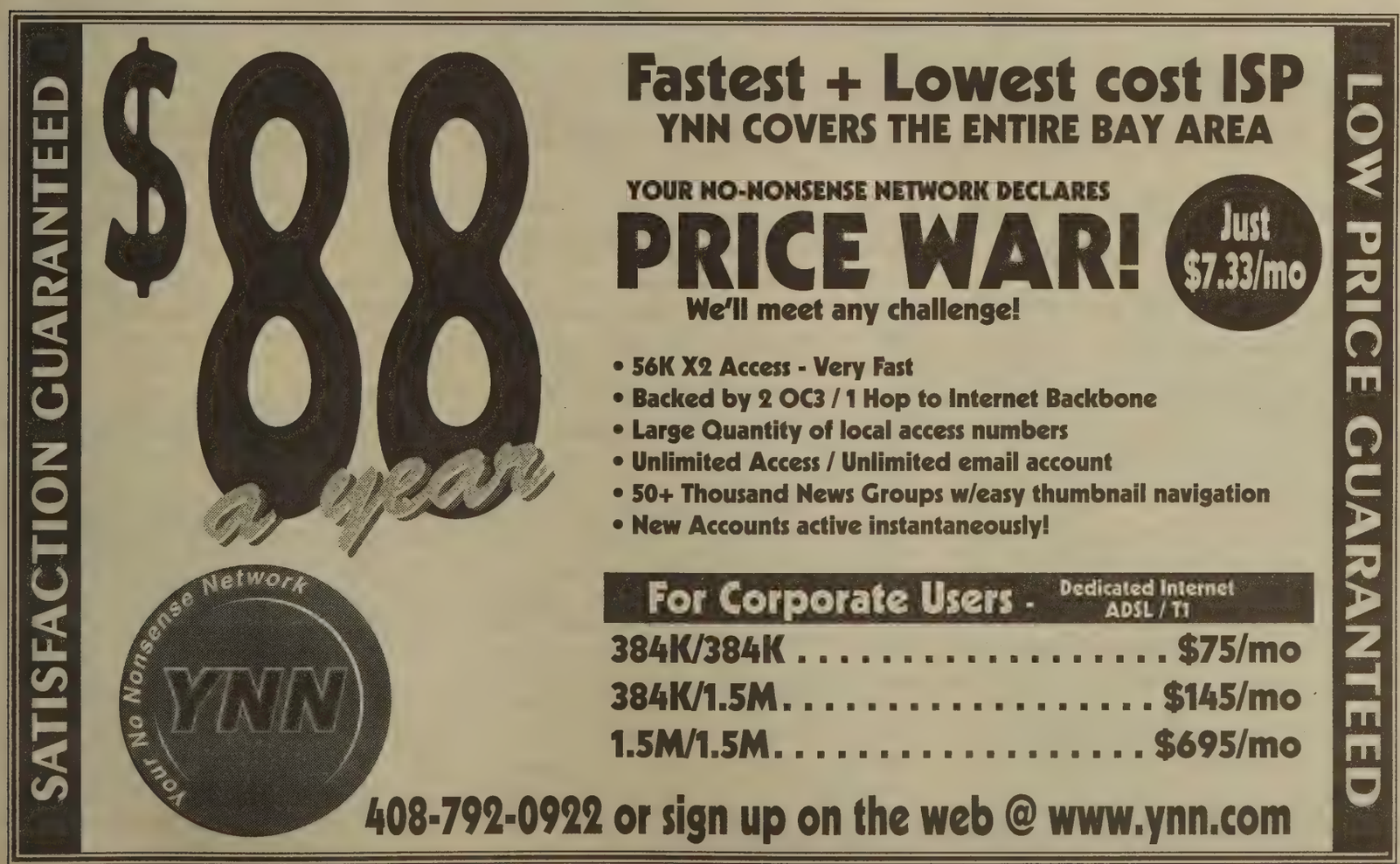
I used the Video Sphinx Pro to digitize some funny bits I had taped from my favorite television programs. (My screensaver plays back nearly all multimedia files, including MPEG, and there are many times I end up just watching it like TV.) The results were absolutely superb, even at 160 x 112, and it couldn't have been any easier.

Video Sphinx Pro is a tremendous product with only a few minor rough edges in the software. It's hard to believe that they can get all the necessary bandwidth out of the parallel port, but they do. If your multimedia needs include MPEG video clips, the Video Sphinx Pro deserves a hard look. ◆

Copyright © 1998 by Douglas J. Nakakihara. All rights reserved.

Resources:

Video Sphinx Pro, $399
FutureTel
1092 East Arques Ave.,
Sunnyvale, CA 94086
Phone: (408)522-1400
Fax: (408)522-1404
www.futuretel.com


SATISFACTION GUARANTEED
$88 a year
Your No Nonsense Network
YNN
Fastest + Lowest cost ISP
YNN COVERS THE ENTIRE BAY AREA
YOUR NO-NONSENSE NETWORK DECLARES
PRICE WAR!
We'll meet any challenge!
Just $7.33/mo
• 56K X2 Access - Very Fast
• Backed by 2 OC3 / 1 Hop to Internet Backbone
• Large Quantity of local access numbers
• Unlimited Access / Unlimited email account
• 50+ Thousand News Groups w/easy thumbnail navigation
• New Accounts active instantaneously!
For Corporate Users - Dedicated Internet ADSL / T1
384K/384K $75/mo
384K/1.5M $145/mo
1.5M/1.5M $695/mo
408-792-0922 or sign up on the web @ www.ynn.com
LOW PRICE GUARANTEED

Calendar of Events

May 16 and May 23

Reconnecting, a "Weekend Workplace Workshop"

Menlo Park

Do you envy laptop PCs that can recharge, but you can't? Wonder what, "He who dies with the most toys," really wins? Well, Tom Mahon has put together Reconnecting—a "weekend workplace workshop," for those stressed-out Silicon Valley workers to talk about workplace issues in a non-threatening environment and explore ways to maintain the human spirit amid the stress of the technology workplace. It takes place on two Saturdays—May 16th and 23rd—at Vallombrosa Center in Menlo Park from 9 am to noon. They focus on age-old techniques of still and moving meditation that can help give meaning and purpose to leading-edge technology, to help relax the body and ease the mind of individuals, and envision the role of technology in creating a just society. Suggested donation is $20, but no one is turned away. For information and reservations, call Vera Davis at (650)325-5614, or visit *www.reconnecting.com*.

September 30–October 2

ComNet Conference & Exposition

Moscone Convention Center, San Francisco

ComNet/San Francisco is the largest technology conference and exposition dedicated to global networking utilizing wide-area telecommunications, data communications networking, and Internet technologies. Each year more than 800 manufacturers and suppliers of computer networking hardware, software, services, and solutions participate in ComNet. The expo has captured the imagination of IT buyers, information seekers, and network professionals responsible for designing, building, facilitating, and managing global networks. The success of this expo impacts over 80 countries around the world and more than a dozen other ComNet branded events in Europe, Asia, and South America. 1-800-545-EXPO. *www.comnetexpo.com*.

Conferences, Shows, Special Events

May

May 16 MarketPro Computer Shows & Sales. Fresno Fairgrounds, Fresno. MarketPro. Contact: 1-800-708-7555, or *http://marketpro.com*.

May 17 MarketPro Computer Shows & Sales. San Joaquin County Fairgrounds, Stockton. MarketPro. Contact: 1-800-708-7555, or *http://marketpro.com*.

May 17–19 Cyber-Trends 1998. Indianapolis, IN. Macmillan Publishing USA. Contact: *www.mcp.com/cybertrends*.

May 18–21 PC Tech Forum. Fairmont Hotel, San Jose. PC Magazine/Micro Design Resources. Contact: 1-800-527-0288, or *www.pcmag.com/pctechforum*.

May 20–22 Forum For Hand-Held Computing In Healthcare. LA. World Market Strategies Ltd./PDA. Contact: *www.pda-expo.com*.

May 24 MarketPro Computer Shows & Sales. Sonoma County Fairgrounds, Santa Rosa. MarketPro. Contact: 1-800-708-7555, or *http://marketpro.com*.

May 25 MarketPro Computer Shows & Sales. Centre Plaza at Double Tree, Modesto. MarketPro. Contact: 1-800-708-7555, or *http://marketpro.com*.

May 27–30 Electronic Entertainment Expo (E3). Atlanta, GA. IDG. Contact: 1-800-315-1133 or *www.e3expo.com*.

May 30 MarketPro Computer Shows & Sales. San Joaquin County Fairgrounds, Stockton. MarketPro. Contact: 1-800-708-7555, or *http://marketpro.com*.

May 31 MarketPro Computer Shows & Sales. Scottish Rite Center, Sacramento. MarketPro. Contact: 1-800-708-7555, or *http://marketpro.com*.

June

June 3–4 Networks Expo. NY. Miller Freeman/Network Expo Contact: *www.networksexpo.com*.

June 6–7 MarketPro Computer Shows & Sales. Cal Expo, Sacramento. MarketPro. Contact: 1-800-708-7555, or *http://marketpro.com*.

June 13–14 MarketPro Computer Shows & Sales. Solano Co. Fairgrounds, Vallejo. MarketPro. Contact: 1-800-708-7555, or *http://marketpro.com*.

June 15–18 WEB.X-New York. NY. Miller Freeman, Inc. Contact: *www.webdotx.com*.

June 16–18 PC Expo. NY. Miller Freeman Group. Contact: 1-800-829-3976 or *www.pcexpo.com*.

June 16–18 The AS/400 Strategies Conference. Chicago, IL. DCI. Contact: (978) 470-3880, or *www.dci.com*.

June 17–19 Wet Ice 98. Palo Alto. IEEE Computer Society. Contact: (304)293-7226, or *wetice@cerc.wvu.edu*, or *www.cerc.wvu.edu/WETICE/template.html*.

June 20 MarketPro Computer Shows & Sales. Sonoma County Fairgrounds, Santa Rosa. MarketPro. Contact: 1-800-708-7555, or *http://marketpro.com*.

June 21 MarketPro Computer Shows & Sales. Scottish Rite Center, Sacramento. MarketPro. Contact: 1-800-708-7555, or *http://marketpro.com*.

June 22–24 The Knowledge Management Conference. Boston, MA. DCI. Contact: (978) 470-3880, or *www.dci.com*.

June 23–25 Windows NT Expo. Boston, MA. DCI. Contact: (978)470-3880, or *www.dci.com*.

June 23–25 Database And Client/Server World. Hynes Convention Center, Boston, MA. DCI. Contact: (978)470-3880, or *www.dci.com*.

June 24–26 Building Data Warehouses and Data Marts to Deliver Measurable Business Benefits. Dallas, TX. DCI. Contact: (978)470-3880, or *www.dci.com*.

June 25–27 Graphix East 98. PA. Graphic Arts Show Company, Inc. Contact: *www.gasc.org*.

June 27 MarketPro Computer Shows & Sales. Fresno Fairgrounds, Fresno. MarketPro. Contact: 1-800-708-7555, or *http://marketpro.com*.

June 28 MarketPro Computer Shows & Sales. Civic Auditorium, Stockton. MarketPro. Contact: 1-800-708-7555, or *http://marketpro.com*.

July

July 5 MarketPro Computer Shows & Sales. Sonoma Co. Fairgrounds, Santa Rosa. MarketPro. Contact: 1-800-708-7555, or *http://marketpro.com*.

July 7–9 MacWorld Expo. Jacob K. Javits Convention Center, NY. IDG. Contact: 1-800-645-EXPO, or *www.macworldexpo.com*.

July 12 MarketPro Computer Shows & Sales. Civic Auditorium, Stockton. MarketPro. Contact: 1-800-708-7555, or *http://marketpro.com*.

July 18 MarketPro Computer Shows & Sales. Centre Plaza at Double Tree, Modesto. MarketPro. Contact: 1-800-708-7555, or *http://marketpro.com*.

July 21–23 Teen Power Interactive '98. San Francisco. iqpc. Contact: 1-800-882-8684, *www.iqpc.com*.

July 28–30 Marketing Automation Conference and Expo. New York, NY. DCI. Contact: (978)470-3880, or *www.dci.com*.

August

August 14–15 Multicultural Internet Confer-ence and Expo. Los Angeles. Contact: *info@mcice.com*, or *www.mcice.com*.

September

September 1–3 eBusiness World. Boston, MA. DCI. Contact: (978)470-3880, or *www.dci.com/eBusiness*.

September 2–3 Internet Expo. MA. DCI. Contact: *www.dci.com/Internet*.

September 14–17 TRACE. Santa Clara. IDG. Contact: 1-888-545-9800, or *www.trace-expo.com*.

September 15–17 IT Forum '98. New York. Miller Freeman. Contact: *www.itforum.com*.

Classes, Seminars, Workshops

May

May 16 Intro to FrontPage. San Francisco. The Learning Annex. Contact: (415)788-5500.

May 16 Intro to Windows 95–Hands-On. San Jose. Computerific!. Contact: (408) 295-6042, *www.computerific.com*.

Show Solutions

You Will Save Money at this Show!

There is no better show for you to save a lot of money at. Like at other shows, you can get your hands on all of the latest computer and internet technology; but at Robert Austin Computer Shows, you can save a whole lot of money.

Saving you money is one of the reasons the admission to the Computer Show is free. This is the show where you can gain a working knowledge of the state of the art in computer technology and scores of stores sell it for special, one day only show prices.

When you get to the show, you will see thousands of people carting around all kinds of computers and computer related equipment because they know how much money they are saving at this show.

RobertAustin

Presents the Bay Area's Largest

COMPUTER SHOW

& INTERNET EXPO!

Computer Dating for Married People

Bob, Sue & their son went on a date with the money they saved at this show!

FREE ADMISSION • FREE ADMISSION

See More Internet Exhibits Than Ever Before!

GET BIG SAVINGS WITH SHOW PRICES!

Learn and save from dozens of reputable retailers competing under one roof to offer the best savings and guarantees!

Customer satisfaction & tremendous savings are the goals of our shows!

Attend Special FREE Slip.net Internet Seminars

FREE* Internet Startup Kits with FREE Netscape Navigator™ & FREE Internet Access

OUTRAGEOUS DEALS UNDER ONE ROOF!

- •Internet Education
- •Buy at Wholesale
- •Internet Service
- •Software & CD ROM
- •See Hundreds of Displays
- •Explore thousands of products

San Francisco
COW PALACE
Saturday, May 23rd
& Saturday, June 13th

Oakland
OAKLAND CONVENTION CENTER
10th & Broadway
Saturday, May 30th
& Saturday, June 20th

Get On VIP List

When you register at show be sure to give us your e-mail address and receive seminar schedules and save time by being pre-registered.

* Limited to stock on hand.

ALL SHOWS 10AM-4PM

Robert Austin Corporation

Computer Show Information Hotlines
For Show Dates and Locations 24 Hours a Day

Telephone:
1-800-243-7041

or visit our Web Page on the Internet
http://www.robertaustin.com

MarketPro Show Hrs. 10 - 5pm
COMPUTER SHOWS & SALES
• SUN. MAY 24 - SANTA ROSA
Sonoma Co. Fairgrounds
• MON. MAY 25 - MODESTO
Centre Plaza at Double Tree
• SAT. MAY 30 - STOCKTON
San Joaquin Co Fairgrounds
• SUN. MAY 31 - SACRAMENTO
Sottish Rite Center
• JUNE 6&7 - SACRAMENTO
Cal Expo
For Info.:(415) 456-6730
$1 OFF Adm. W/Ad Regular Adm $6
• JUNE 13&14 - VALLEJO
Solano Co. Fairgrounds
• SAT. JUNE 20 - SANTA ROSA
Sonoma Co. Fairgrounds
• SUN. JUNE 21 - SACRAMENTO
Sottish Rite Center
• SAT. JUNE 27 - FRESNO
Fresno Fairgrounds
• SUN. JUNE 28 - STOCKTON
Civic Auditorium
Internet: http://marketpro.com
SAVE UP TO 90% HARDWARE • SOFTWARE • ACCESSORIES

Our Readers Respond...
70% of our readers visit a Web site due to an advertisement in *MicroTimes*. Let us help put to work for you the power of informed and responsive customers.
MICROTIMES
www.microtimes.com
(510) 768-1200

WE'RE GOING TO CHANGE THE WAY YOU THINK ABOUT NETWORKING
- Preconfigured Networks
- High Performance Servers & Workstations
- Networking Products & Services
- Computer Upgrades/Service/Repairs
- Network & PC Maintenance
- E-Mail/Groupware Installation
- Software Installation/Configuration
- LAN/WAN Networking
PLEASE TURN TO OUR FULL-PAGE AD ON PAGE 41
AUTHORIZED RESELLER
IBM hp 3Com Microsoft Windows NT Ready-to-Run Certified NetWare Engineer ASCEND
KEEP UP WITH THE LATEST TECHNOLOGY WITH
PROVEN TECHNOLOGY
1-800-PTI-2WAN
(794-2926)

May 16–18 A Hands-On Multimedia Design and Production Workshop. San Francisco. SFSU Extended Education. Contact: (415)904-7700, or *http://msp.sfsu.edu* .

May 18 Color Correction in Photoshop. The Fairmont, San Francisco. DPA Communication. Contact: 1-800-269-5742, or *www.colorweb.com* .

May 18 Intro to Word 7.0. San Francisco. The Learning Annex. Contact: (415)788-5500.

May 18 Word 7.0 Advanced. San Francisco. The Learning Annex. Contact: (415)788-5500.

May 18 Intro to UNIX. San Francisco. The Learning Annex. Contact: (415)788-5500.

May 18 Intro to Microsoft Outlook 97. San Francisco. The Learning Annex. Contact: (415) 788-5500.

May 18 Microsoft PowerPoint–Hands-On. San Jose. Computerific!. Contact: (408) 295-6042, or *www.computerific. com* .

May 18–21 AutoCAD R14 3D Workshop. Santa Clara. The Copper Connection. Contact: (408)970-9838, *TeachACAD @aol.com* , or *www.copperconn. com* .

May 18–22 3D Studio MAX I. San Francisco. SFSU Extended Education. Contact: (415)904-7700, or *http://msp. sfsu.edu* .

May 19 Intro to Windows 95. San Francisco. The Learning Annex. Contact: (415)788-5500.

May 19 Color Correction in Photoshop. Los Angeles. DPA Communication. Contact: 1-800-269-5742, or *www.colorweb.com* .

May 19 Safety-Critical Systems—Software Issues Seminar. Orlando, FL. Aonix. Contact: 1-800-971-6649, or *www.aonix.com/seminars* .

May 20 Microsoft Access. San Francisco. The Learning Annex. Contact: (415)788-5500.

May 20 Access 97. San Francisco. The Learning Annex. Contact: (415)788-5500.

May 20 Safety-Critical Systems—Software Issues Seminar. St. Louis, MO. Aonix. Contact: 1-800-971-6649, or *www.aonix.com/seminars* .

May 21 Safety-Critical Systems—Software Issues Seminar. Seattle, WA. Aonix. Contact: 1-800-971-6649, or *www.aonix.com/seminars* .

May 23 Intro to HTML. San Francisco. The Learning Annex. Contact: (415)788-5500.

May 25 Intro to the IBM PC. San Francisco. The Learning Annex. Contact: (415)788-5500.

May 25 Advanced UNIX. San Francisco. The Learning Annex. Contact: (415)788-5500.

May 28 Intro to Windows 95–Hands-On. San Jose. Computerific!. Contact: (408) 295-6042, or *www.computerific.com* .

May 29 Cruising the Internet–Hands-On. San Jose. Computerific!. Contact: (408)295-6042, *www.computerific.com* .

May 30–31 Windows 95 Super Weekend. San Francisco. The Learning Annex. Contact: (415)788-5500.

June

June 1–4 AutoCAD R14 Fundamentals Workshop. Santa Clara. The Copper Connection. Contact: (408) 970-9838, *TeachACAD@aol.com* , or *www.copperconn.com* .

June 2 Free Seminar: CNE/MCSE Network Certification–Networking For Your Future. San Jose. LANOP. Contact: (408)441-9902.

June 4 Intro to Word 7.0. San Francisco. The Learning Annex. Contact: (415)788-5500.

June 4–6 Printed Circuit Design for Analog/RF Workshop. Santa Clara. The Copper Connection. Contact: (408)970-9838, *TeachACAD@aol.com* , or *www.copperconn.com* .

June 6 Navigate the Internet with Netscape Navigator. San Francisco. The Learning Annex. Contact: (415)788-5500.

June 6 Intro to HTML. San Francisco. The Learning Annex. Contact: (415)788-5500.

June 8 Intro to Windows 95. San Francisco. The Learning Annex. Contact: (415)788-5500.

June 8–11 AutoCAD R14 Advanced 2-D Workshop. Santa Clara. The Copper Connection. Contact: (408) 970-9838, *TeachACAD@aol.com* , or *www.copperconn.com* .

June 9 Localizing Multimedia and Training Materials. Mt. View. SimulTrans, L.L.C.. Contact: *www.simultrans.com/events.htm#schedule* .

June 9 Excel 7.0. San Francisco. The Learning Annex. Contact: (415)788-5500.

June 9 Real-Time Win32 and Java Seminar. Seattle, WA. Aonix. Contact: 1-800-971-6649, or *www.aonix.com/seminars* .

June 11 Advanced HTML. San Francisco. The Learning Annex. Contact: (415)788-5500.

June 11 Real-Time Win32 and Java Seminar. Los Angeles. Aonix. Contact: 1-800-971-6649, or *www.aonix.com/seminars* .

June 12 QuickBooks 5.0. San Francisco. The Learning Annex. Contact: (415)788-5500.

June 15 Internet Intensive. San Francisco. The Learning Annex. Contact: (415)788-5500.

June 15 Internet Marketing Magic. San Francisco. The Learning Annex. Contact: (415)788-5500.

June 15–16 AutoCAD R14 Update (R12 Users) Workshop. Santa Clara. The Copper Connection. Contact: (408) 970-9838, *TeachACAD@aol.com* , or *www.copperconn.com* .

June 16 Real-Time Win32 and Java Seminar. Boston, MA. Aonix. Contact: 1-800-971-6649, or *www.aonix.com/seminars* .

June 17 AutoCAD R14 Update (R13 Users) Workshop. Santa Clara. The Copper Connection. Contact: (408) 970-9838, *TeachACAD@aol.com* , or *www.copperconn.com* .

June 17 Intro to PowerPoint. San Francisco. The Learning Annex. Contact: (415)788-5500.

June 18 QuickBooks 5.0. San Francisco. The Learning Annex. Contact: (415)788-5500.

June 20 Intro to FrontPage. San Francisco. The Learning Annex. Contact: (415)788-5500.

June 20 Intro to HTML. San Francisco. The Learning Annex. Contact: (415)788-5500.

June 22 Intro to Word 7.0. San Francisco. The Learning Annex. Contact: (415)788-5500.

June 22 Intro to Windows 95. San Francisco. The Learning Annex. Contact: (415)788-5500.

June 22 Intro to UNIX. San Francisco. The Learning Annex. Contact: (415)788-5500.

June 24 Microsoft Access. San Francisco. The Learning Annex. Contact: (415)788-5500.

June 25 Free Seminar: CNE/MCSE Network Certification—Networking For Your Future. San Jose. LANOP. Contact: (408)441-9902.

June 27–28 Windows 95 Super Weekend. San Francisco. The Learning Annex. Contact: (415)788-5500.

June 29 Intro to the IBM PC. San Francisco. The Learning Annex. Contact: (415)788-5500.

June 29 Advanced UNIX. San Francisco. The Learning Annex. Contact: (415)788-5500.

July

July 2 Intro to Word 7.0. San Francisco. The Learning Annex. Contact: (415)788-5500.

July 2 Intro to Word 7.0. San Francisco. The Learning Annex. Contact: (415)788-5500.

July 6 Intro to Windows 95. San Francisco. The Learning Annex. Contact: (415)788-5500.

July 6–9 AutoCAD R14 Fundamentals Workshop. Santa Clara. The Copper Connection. Contact: (408) 970-9838, *TeachACAD@aol.com* , or *www.copperconn.com* .

July 7 Excel 7.0. San Francisco. The Learning Annex. Contact: (415)788-5500.

July 9 Internet Marketing Magic. San Francisco. The Learning Annex. Contact: (415)788-5500.

July 13 Internet Intensive. San Francisco. The Learning Annex. Contact: (415)788-5500.

July 13 Intro to Word 7.0. San Francisco. The Learning Annex. Contact: (415)788-5500.

July 13–16 AutoCAD R14 Advanced 2-D Workshop. Santa Clara. The Copper Connection. Contact: (408)970-9838, *TeachACAD@aol.com* , or *www.copperconn.com* .

July 14 Software and Technical Marketing in Eastern Europe. Mt. View. SimulTrans, L.L.C.. Contact: *www.simultrans.com/events.htm#schedule* .

July 15 Intro to PowerPoint. San Francisco. The Learning Annex. Contact: (415)788-5500.

July 16–18 PCB Design for Fabrication and Assembly Workshop. Santa Clara. The Copper Connection. Contact: (408)970-9838, *TeachACAD@aol.com* , or *www.copperconn.com* .

July 18 Intro to FrontPage. San Francisco. The Learning Annex. Contact: (415)788-5500.

July 20 Intro to UNIX. San Francisco. The Learning Annex. Contact: (415)788-5500.

July 20–23 AutoCAD R14 3D Workshop. Santa Clara. The Copper Connection. Contact: (408)970-9838, *TeachACAD@aol.com* , or *www.copperconn.com* .

July 27 Intro to Windows 95. San Francisco. The Learning Annex. Contact: (415)788-5500.

July 27 Advanced UNIX. San Francisco. The Learning Annex. Contact: (415)788-5500.

August

August 3–6 AutoCAD R14 Fundamentals Workshop. Santa Clara. The Copper Connection. Contact: (408)970-9838, *TeachACAD@aol.com* , or *www.copperconn.com* .

August 10–13 AutoCAD R14 Advanced 2D Workshop. Santa Clara. The Copper Connection. Contact: (408)970-9838, *TeachACAD@aol.com* , or *www.copperconn.com* .

August 17–20 Autodesk Mechanical Desktop Workshop. Santa Clara. The Copper Connection. Contact: (408)970-9838, *TeachACAD@aol.com* , or *www.copperconn.com* .

August 25–27 Drafting Fundamentals Workshop. Santa Clara. The Copper Connection. Contact: (408)970-9838, *TeachACAD@aol.com* , or *www.copperconn.com* .

Super Discount Source of Computers, Accessories & Peripherals
universalcomputers.com

Laptops TOSHIBA
LibrettoSOCT P100, 6.1" TFT 16/770MB $695
T-440CDT P133, 12.1" TFT 16/1.5GB $1550
Lowest Prices on all TOSHIBA Laptops ..... Guaranteed

G3/250 32/5GB, 20xCD/ 56K Fax/Mdm $4333
G3/233 & G3/266 ..... $1477/1688
4400/200 32/2GB, 12xCD $999
9600/200MP 32/4GB, 12xCD $1788

CD ROM & CD Recordable
4x8 CD-R $469
2x4x6 CD-R W $579
32x CD-ROM $79
HITACHI DVD
DVD Internal w/Card & 3 Titles $199

WACOM Graphic
ArtPad II 4x5/ArtZ II 6x8 ..... $119/259
ArtZ II 6x8/12x12 w/Painter 5 $489/589
ArtZ II 6x8"/12x12" $195/289

CDR Media
74Min., 650MB
10 Pack $17
100+ $1.39
1000+ ..... CALL

Fax/Modem
56KX2 PCMCIA PC $99
56KX2 Int. PC $79
56KX2 Ext. MAC $149
US Robatics 56KV.90 Ext. MAC $169

SOFTWARE
Super Deals
MS Office 98 for MAC $399
MS Office 97 Pro for PC $379
MS Excel 97 for PC $199
MS Word 98 for MAC $159
MS Word 97 for PC $149
MS Windows NT 4.0 5User $499
Photoshop 4.0 ..... $398
Illustrator 7.0 ..... $288
PageMaker 6.5 ..... $345
QuarkXpress 4 ..... $695
Freehand 8 ..... $289
Painter 5 ..... $239

Color Displays
SONY

ViewSonic
GT 775 17" $555
G810 21" $979
P810 21" $1175

AGFA
Arcus II $1175
DuoScan $2975
ePhoto 307 ..... $309
ePhoto 1280 ..... $799

Memory Competitive Prices on Simm & Dimm modules

UMAX Scanners
The Magic of Color™
UG-630, 600 dpi $79
Astra 610S $117
Astra 1200S $239
Astra 1220P 36 bit $259
PowerLook II $1179

HEWLETT PACKARD Printers
Blowout
LaserJet 4V 11"X17" 600dpi,16ppm,4MB $1285
NEW LaserJet 4000/4000*/4000N 17PPM, 1200dpi $1029/899/1379
LaserJet 4000T/4000TN/5000/5000N $1195/1485/1385/1845
LaserJet 5/5M/5N/5MP/5MP* $895/1325/1145/595/495
L.t 6L/6MP/6P/6P*/4V*/4MV $339/815/595/1195/1875

Hard Disk Drive
Upgrade your notebooks' drive & we will include EZ Drive software!
2.1GB/3GB 2.5" $189/229
4GB/5GB 2.5" for all laptops $339/549
Zip / Zip Plus Drive $135/179
Jaz / Jaz II Drive $279/559
Jaz 3 pack/Zip10 pack Crtrdg. $235/95

Adaptec
AHA-2940UW SCSI-II & SCSI III $199
AHA-1535 PCI bus Int. SCSI card $59
Quantum Atlas 4.5GB III $379
Apple Original 2GB SCSI II $159
Seagate Hawk 4.5GB SCSI II $289
Seagate Cheetah 9GB SCSI III $779

UNIVERSAL COMPUTERS, INC.
1-800-621-1963
Tel:(818)-786-8150 Fax:(818)787-2111
e-mail:usales@universalcomputers.com

Bulletin Boards

Multizone

BayPlay BBS. (408)227-9300, 955-0278, 296-2910; (415)951-9606; (650)968-6843, 366-8249, 341-4531, 583-6900; (510)780-9484, 426-2438, 793-8637, or *www.bayplay.com* ; Telnet: *//bayplay.com* . 24 hrs., 28,800. Worldgroup, 16 lines, adults only, free trial, membership, trivia, crosswordz, TradeWars 2000. ALL lifestyles welcome. Sysop: Zoltan. [Exp. #181]

415

GGCS BBS. (415)457-2516. 8-N-1, 24 hrs., 33600/2400 (limited access less than 9600 bps). Free BBS. Users helping users. Sponsored by Golden Gate Computer Society. Sysop: Doug Rainger. [Exp. #181]

Sherman's Shelter BBS. (415) 872-0242. 8-N-1, Fido echo and more including Usenet connection. WildCat v4.20 with an ANSI or textual interface. Has a qwk door! Free. [Exp. #179]

The Compound Eye. (415) 749-0426. 24 hrs., up to 28,800. Free. Our tentacles have infiltrated your mind. There is no escape. Sysops: Deekoo L. & Monde. [Exp. #180]

TLC Net Server. (415)826-2116. 24 hrs., 33,600. LORD 4, games, chat, email, Telnet, FTP, PPP, POP3, Internet. [Exp. #179]

Ultimate Force. (415)441-1120. 8-N-1, 24 hrs., 300–19,200. Online games, multi-message bases, files, 1.2GB. Only comlink network in Northern CA. Free access. [Exp. #179]

510

Red Dwarf BBS. (510)261-3966. 24 hrs., 2400–28.8. Wildnet, Cyber-3Dnet, MSI SupportNet, messages, files, doors. SciFi/RPG based, but we offer more. All welcomed. Sysop: Earl Williams. [Exp. #180]

The Stage. (510)251-2431. 24 hrs., Pagan-oriented. PODSnet, Nirvananet. Magical library. Join the play. No validation, free. Sysop: Liana. [Exp. #179]

Windows OnLine. (510)736-8343, Telnet: *WOLLY.WOLNET.COM* , *www.wolnet.com* . 8-N-1, 24 hrs., 33,600. Largest Windows BBS. Free limited trial. [Exp. #179]

650

Bay Windows BBS. (650)871-0359. 8-N-1, DOS, Windows, games, online door games, no gifs, no handles, free 24 hrs. Echo mail sponsored here. Sysop: Judy. [Exp. #180]

Kewl! BBS. (650)592-8520. Telnet: *kewl.net*, 20 nodes, worldgroup. Games featuring MajorMUD, WWW/Telnet/FTP/IRC, Internet email services, files, forums, chat, and more. Free trial! *www.kewl.net* . Sysop: Squelch. [Exp. #181]

Kill-O-Byte BBS. (650)344-1563. 24 hrs., 2400–33,600. Online files, CD-ROMs, games, Amiga, IBM, OS/2, Windows. FREE access! [Exp. #182]

Lord Jesse's Castle. (650)493-0607. 14,400. Friendly sysop. Twenty doors. Many message bases! We just got a cool door called Dogworld! Free. Sysop: Jesse Radin. [Exp. #179]

Peninsula Computer BBS. (650)571-9259. 8-N-1, 24 hrs., 2400–28,800. GT Power Network v1900, email, nearly 2,000 files: DOS, OS/2, shareware, door games for callers. Sponsored by the Peninsula Computer Club. FREE BBS, *www.sirius.com/~jlo* . Bob Wallace. [Exp. #180]

The International Academy for Peace Education BBS. (650)992-4274. 8-N-1, 24 hrs., Use vt100 emulation. Ethical Empirical Economics and more. Free. Sysop: Dennis McNamara. [Exp. #181]

707

Monkey Glands. (707)542-5587. Linux-based system in Santa Rosa. No validation, free. Sysop: Magic Man. [Exp. #179]

Party Line BBS. (707)542-3193. 24 hrs., up to 14,400. 12 lines. General entertainment, chatlink each night, free access telnet: *partyline.com* . [Exp. #179]

StarBase 515. (707)792-0880. 8-N-1, 24 hrs., 33,600 BPS. Spitfire-based system, with nearly 10GB of online files on 21 CD-ROM drives!, Free access, too! [Exp. #180]

The Duck Pond BBS. (707) 585-6251. 8-N-1, 24 hrs., 33,600 BPS. Spitfire-based system, with 10GB of files, & also free access. [Exp. #180]

The Mos Eisley BBS. (707) 588-8484. 8-N-1, 24 hrs., 33,600 BPS. Spitfire-based system, with Lord, & Lord 2. Free access! [Exp. #180]

User Groups

Amiga

AWEST—Amiga Users In SF. Meetings: 2nd Wed., 6:30 pm, Excelsior Branch Public Library, 4400 Mission St. (near Ocean), San Francisco. Call: (415)474-1164; BBS (415)441-1120. [Exp:#181]

TOGA—The Other Group Of Amigoids. Meetings: 4th Sat., 12:30 pm, Milpitas Community Library Meeting Rm., 40 N. Milpitas Blvd., Milpitas. An informal group to share ideas, PD software, and information. Free. Contact: Randy Abel, (408)356-9405, or *rabel1@dsp.com* ; Warren Burnham, (408)252-3406, or *wburn46506@aol.com* ; *www.calweb.com/~rabel1* . [Exp:#179]

Atari

ABACUS—Atari Bay Area Computer Users Society. Meetings: 1st Sat., 1:00 pm, Potrero Branch Public Library, 2nd floor, 1616 20th St., San Francisco. Supporting all Atari computers and video games systems. Call: Roger Sinasohn, (415)469-7924, BBS (415)564-8062. [Exp:#183]

San Leandro Computer Club. Meetings: 1st Tues., 8:00 pm, San Leandro Main Library Estudillo Rm., 300 Estudillo Ave, San Leandro. Call: Robbie, (510)797-5636. [Exp:#184]

CAD

San Francisco 3D Studio User Group. Meetings: 2nd Sat., Check Web site for location, date, subject, and other information. *www.sf3dsug.com* . [Exp:#183]

San Francisco AutoCAD Users Group. Meetings: 1st Mon., 6:00 pm, SFSU Downtown Center at 425 Market St. Contact: Lillian (415)263-6748, or *www.sfaug.org* . [Exp:#183]

Silicon Valley Autocad Power User Group. Meetings: Quarterly 6:00 pm, Santa Clara Convention Center, 5001 Great America Pkwy., Santa Clara. Contact: Tracy Rogers, (415)282-4448, or *www.power.org* . [Exp:#184]

Commodore

CHUG (Commodore Hayward User Group). Meetings: 2nd Sat., 2:00 –4:00 pm, Palma Ceia Park Clubhouse, Hayward. Commodore 64 and 128 owners are welcome to attend. Call: (510)793-7868. [Exp:#183]

CWEST—Commodore 64/128 Users In SF. 2nd Wed., 6:30 pm, Excelsior Branch Public Library, 4400 Mission (near Ocean), San Francisco. Call: (415)474-1164; BBS (415) 441-1120. [Exp:#181]

IBM And Compatibles

Armageddon LAN Gaming Group. Meetings: Meets monthly in Concord, San Jose, and Sacramento. Any and all games played over a Local Area Network with hundreds of others in the same room. Contact: Tim (510) 682-0826, *www.armageddon-gaming.com* , *or mach1@armageddon-gaming.com* . [Exp:#182]

Diablo Valley PC User Group—DVPC. Meetings: 1st Thurs., 7:00 pm, B of A Technology Center in Lobby Conference Rm., Bldg. B, 2001 Clayton Rd., Concord. SIGs include Internet, Windows, Beginner's, Visual Basic, education/entertainment, and more. Call: Craig Peterson, (510)556-1449, *bod@dvpc.org* , or *www.dvpc.org* . [Exp:#184]

East Bay FOG. Meetings: 2nd Wed., 7:30 pm, Episcopal Church of St. John-in-Montclair, 1707 Gouldin Rd., Oakland. All microcomputers, MS-DOS, CP/M. Call: (510)653-2627, 8 am–10 pm. [Exp:#182]

Golden Gate Computer Society. Meetings: 4th Mon., 7:00 pm, San Rafael Community Center, 618 B St., San Rafael. Free intro to computers class at 6:00 pm. Call: (415)454-5556, or *www.ggcs.org* . [Exp:#184]

PC Clubhouse. Meetings: 1st Fri., 7:30 pm, swap at 7:00 pm, CSU Hayward, Meiklejohn Hall, Rm. 2002. Learn more about your computer. Product demos. Member help. Call: (510)538-2449, (510)276-6450, or *www.pcc.org* . [Exp:#182]

Peninsula Computer Club. Meetings: 2nd Thurs., 7:30 pm, 222 Laurel St., San Carlos. DOS and CP/M libraries. Call: (650) 593-9981, BBS (650)571-9259, or *larryw3553@aol.com* . [Exp:#183]

San Francisco Bay Area Powerbuilder Users Group—(SFBPUG). Meetings: 3rd Thurs., San Francisco. Please check our Web site at *www.sfbpug.org* for location details. Contact: Craig Orr at *crbare@redshift.com* . [Exp:#183]

San Francisco PC Users Group. Meetings: 3rd Tues., 7:30 pm, PUC Auditorium, 505 Van Ness Ave./McAllister. Presentations, Q&A sessions. Call: Pierre Hahn, (415)474-1587, or 777-1332 for recorded events message, *www.sfpcug.org* . [Exp:#181]

Internet

Internet SIG of the Association of Database Developers (ADD). Meetings: 3rd Tues., 7:00 pm, 124 Beale St., Mezzanine Level, San Francisco. Focuses on how to integrate databases into Web sites. Contact: Patrick Lynch, (510)482-5752, *patl@a.crl.com* , or *www.baadd.org* . [Exp:#183]

Macintosh

A32. Meetings: 2nd Sat., 10:00 am, Strawberry Square clubhouse, 530 Strawberry Ln., San Jose (off Moorpark, between Lawrence and Saratoga). Product demos, and Q&A sessions. Contact: (408)881-0790, or *www.batnet.com/rlbrown/A32.html* . [Exp:#181]

BMUG User Group. Meetings: every Thurs., 6:30 pm, BMUG, 2070 Allston Way (basement level), Berkeley. Q&A, vendor demo and raffle. Free. Contact: (510)549-2684, or *www.bmug.com* . [Exp:#184]

User Groups

P.I.E. Macintosh Special Interest Group. Meetings: 3rd Wed., 7:00 pm, Cypress Senior Center, Rm. 4, entry thru Rm. 3, San Jose. Email at *frnmrn@juno.com* . Call: Frank A Arnerich, (408)244-4034, or *www.juno.com* . [Exp:#184]

Peninsula Apple Users Group—PAUG. Meetings: 3rd Tues., 6:30 pm, At the Unitarian Church, 2124 Brewster Ave. (at Lowell, use side entrance), Redwood City. Newsletter, speakers, software demos, DOM, Q & A, library. Contact: Roger Lakner, (650)367-8657, or *www.wwinfocenter.com/PAUG/* . [Exp:#184]

SLAEUG—San Leandro Mac User Group. Meetings: 1st Thurs., 7:30 pm, San Leandro High School, 2200 Bancroft Ave., San Leandro. Best DOM (3 disks) anywhere. Call: Stan (510)351-3973, or *skline@concentric.net* . [Exp:#179]

Miscellaneous

Access SIG of the Association of Database Developers (ADD). Meetings: 2nd Weds., 7:00 pm, 124 Beale St., Mezzanine Level, San Francisco. Contact: Paula Payne (510)594-1152, *pmp@outformations.com* , or *www.baadd.org* . [Exp:#183]

BayCHI. Meetings: 2nd Tues., 7:30 pm, Xerox PARC Auditorium, 3333 Coyote Hill Rd., Palo Alto. Computer-Human Interaction Group. Free and open to the public. Contact: Infoline (408)235-9422, or *www.baychi.org* . [Exp:#181]

DIG.FM—FileMaker Developer Interest Group. Meetings: 3rd Wed., 7:00 pm, FileMaker Inc., 5201 Partick Henry Dr., Santa Clara. Everyone is welcome. Each meeting consists of presentations followed by smaller interest group sessions. Contact: Dave Nicely, (510)526-3744. [Exp:#184]

Fox-VFP SIG of the Association of Database Developers (ADD). Meetings: 1st Thurs., 7:00 pm, 124 Beale St., Mezzanine Level, San Francisco. Contact: Dean Lesner (415)788-4366, *dlesner123@aol.com* , or *www.baadd.org* . [Exp:#183]

Legal SF Bar Assoc. WordPerfect User Group. Meetings: 3rd Wed. odd-numbered months, noon, 465 California St., 11th flr., Boardroom. Chair: Al Buchignani. Call: Alvin Buchignani (415)421-5650. [Exp:#179]

MS Access Peninsula User Group. Meetings: 2nd Fri., 1:00 pm, Metro Center Building, 9th flr., Foster City. All welcome from beginners to professionals. Contact: *www.rampage.net/acc docs/sigs/htm* . [Exp:#181]

North Bay Users Group NBUG. Meetings: 2nd Thurs., 7:30 pm, 330 Rodgers St., Vallejo. Open to all. Contact: Lolly, (707)645-8768, or *www.home.inreach.com/nbug* . [Exp:#181]

Silicon Valley Clarion User Group. Meetings: 2nd Weds., 7:00 pm, San Jose. Contact: Don Wood, *www.desine.com/svcug* . [Exp:#181]

Multimedia

Multimedia SIG Of The Software Forum. Meetings: 4th Thurs., 7:00 pm, Cubberly Community Ctr., 4000 Middlefield Rd., Rm. H-1, Palo Alto. $10. Contact: Mike Schmit, *mschmit@compcore.com* . [Exp:#179]

Networking

EBNUG (East Bay Netware User Group). Meetings: 3rd Thurs., 6:30 pm, Meetings at EBMUD, 375 11th St., Oakland. Contact: Andy Zutler, *azutler@radiolan.com* . [Exp:#184]

South Bay Novell User Group. Meetings: 2nd Thurs., 6:00 pm, Novell offices, 2275 Trade Zone (at Lundy, off Montague east of 101), San Jose. Buffet, vendor presentations, technical education, user forums, "Networking in Hell" stories. Contact: (650) 525-4567, or *ALLANH@SBNUG.ORG* . [Exp:#179]

Novell

Novell Users Group of Monterey/Salinas/Santa Cruz. Meetings: 3rd Thurs., 6:30 pm, 40 Ragsdale Dr., (Ryan Ranch), Monterey. Member-ship: $25/year, or $5/meeting. Contact: *jspencer@jps.net* . [Exp:#182]

PC and TRS-80 Nybblers Computer Club. Meetings: 3rd Fri., 8:00 pm, Prado Internet Access, 1260 A St., Hayward. Contact: For info write *Nybblers @aol.com* , or *www.members.aol.com/Nybblers* . [Exp:#181]

Programming Languages

Java SIG of the Software Forum. Meetings: 1st Tues., 7:00 pm, Cubberly Community Ctr., 4000 Middlefield Rd., Rm. H-1, Palo Alto. Free to members, $10 for non-members. Contact: Tom Hill, *javasig@worldware.com* . [Exp:#181]

Value Net

INTERNETWORK SERVICES

Your One Stop Shop for Internet for Business and Home!

ISDN On-demand LAN connections for as low as $30/mo!
128K Frame Relay connections for as low as $295/mo!
Internet, E-Mail and Web Publishing for your business: $39/mo
Let us design YOUR business Internet solution!
Call us and describe your needs and we'll find the answer for you!

Unmetered PPP dial-up accounts are STILL just $20 per month!

Call **Value Net** now to find out more about what we can do for **YOU!**

Value Net Internetwork Services
2855 Mitchell Drive, Suite 105
Walnut Creek, CA 94598
Phone (925) 943-5769
Fax (925) 943-1708
On the web: **http://www.value.net**

K56 FLEX

User Groups Associations

Texas Instruments

TI-99/4A. Meetings: 2nd Sat., Oakland. Need programs/hardware? Call: Fred, (510)530-8335. [Exp:#184]

UNIX

Bay Area FreeBSD Users Group (BAFUG). Meetings: 2nd Thurs., 7:30 pm, San Francisco and Redwood City. See Web site for directions, updated times, and locations. Free and open to all interested in FreeBSD, UNIX, and OpenSources. Refreshments are provided. Meetings are free. Contact: *www.freebsd.org* , *www.arachna.com/freebsd/freebsd-sf.html* , or *spidaman@arachna.com* . [Exp:#184]

City College of San Francisco Linux Users Group. Meetings: Every Thurs., 3:00 pm, CCSF Student Union, MLK Center, 50 Phelan Ave., San Francisco. Free and open to all interested in Linux and/or UNIX. Contact: (415)239-3108, or *jhauck01@ccsf.cc.ca.us* . [Exp:#179]

San Francisco Bay Area FreeBSD User Group. Meetings: 7:30 pm, This group serves the needs of the San Francisco Bay Area FreeBSD user base and holds meetings approximately once a month. Please see Web page for details. Contact: *www.arachna.com/freebsd/freebsd-sf.html* . [Exp:#182]

Windows

Bay Area Windows NT User Group (BANTUG). Meetings: 1st Sat., 1:00 pm, San Francisco and Cupertino, see Web site for times and locations. This professional association is for NT systems administrators and developers. Contact: Edwin Rutsch, (510)528-9895, or *edwin@wyp.net* , or *www.bantug.org* . [Exp:#181]

Central California Windows NT Users Group. Meetings: 1st Sat., 10:00 am, Oakhurst. Contact: Robert Slovick, (209)683-1499, or *www.inetassist.com/ntug* . [Exp:#181]

Association For Women In Computing. Meetings: 1st Wed., 6:00 pm, standing room only, Crocker Galleria, 50 Post St., San Francisco. $10 members, $15 guests. Call: (415) 979-8450. [Exp:#179]

ICCA Silicon Valley. Meetings: 4th Tues., 6:00 pm, Hobbee 's Restaurant, 920 Town and Country Village (Stevens Creek/across from Valley Fair Mall), San Jose. Regularly-scheduled dinner meetings, $25 non-members/$20 members. Contact: Paul Stith, (408)439-0870 ext. 2, *info@icca-sv.org* , or *www.icca-sv.org* . [Exp:#182]

San Francisco Association of Internet Professionals. Macromedia, 600 Townsend St., 1st floor, main lobby, San Francisco. A membership- and chapter-driven organization with the ability to unify, support, and represent the global community of Internet professionals. See Web site for meeting times/location. Contact: Jeff Ward, (408) 899-2011, *jward@association.org* , or *www.association.org* . [Exp:#181]

San Francisco Web Business Mixer. Meetings: 2nd Weds., San Francisco. A monthly after work mixer and networking event for people in the business of Web publishing, design, advertising, marketing, and commerce. $5.00 gets you table space and T1 access. Bring your business cards, brochures and URLs! Contact: Details on the monthly featured speaker are always at *www.webmixer.com* . [Exp:#183]

Society For Technical Communication, San Francisco Chapter. Meetings: 3rd Wed., 6:00 pm, London Wine Bar, 415 Sansome St., San Francisco. For technical writers and editors. Newsletter, annual competition. Non-members, $12. Contact: (415)985-7121, or *http://stc.org/region8/sfc/www* . [Exp:#181]

The Software Forum. Meetings: 3rd Wed., 6:00 pm, Michaels at Shoreline, San Francisco. Call ahead to reserve a place. Contact: Kim Murray (650)854-8298, or *www.softwareforum.org* . [Exp:#181]

continued from page 80

etails and relationship to Drive-TIP are not clear.

The 9ZX manual specifies cooling requirements, but in a way that the average user may find hard to fulfill. If you go for a 10,000rpm, or even a 7,200rpm drive, make sure your case has multiple, properly located fans and good air circulation (and is, preferably, certified for such drives). You may want to use cooling bay enclosures, which have fans of their own. (The one listed in the recommended system specifications has two.) Don't skimp either on the power supply, as multiple high-end drives consume more power; or on SCSI cables, as the average cable may not be up to the SCSI specs (more on these subjects in a future column).

What distinguishes the UltraPleX is that it is an ultra SCSI drive. Thus, while other CD-ROM drives support the SCSI bus rate of 10MB/sec, the UltraPleX doubles that to 20MB/sec, improving the performance of large block sequential access, the most common type of CD operations.

Identify the versions of your components' BIOS/firmware (this can be done via NT's Control Panel/SCSI Adapters facility) and check the vendors' Web site, or with technical support for the latest. Sometimes there are upgrades which fix bugs, or can improve performance considerably. You may be able to upgrade yourself, using a vendor supplied utility.

To see if actual performance matches the published rates, stay tuned for benchmark results over several common application workloads.

Author's Note

I would like to thank Chen Lu from Adaptec, Steve Kennedy and Skip Shapiro from Quantum, and Pat Wadkins from IBM, for their help with this article.

While EIDE drives are less expensive than SCSI drives and work with a controller built into the motherboard (the SCSI controller is purchased separately), tests have shown that they are slower than SCSI drives.

You can find up-to-date information about this series—including latest recommended system specifications and pertinent links—as well as information not incorporated in the articles due to space constraints (e.g. software recommendations) at *www.microtimes.com/32bitres.html* . ◆

Copyright © 1998 by Fabian Pascal. All rights reserved.

Resources:

Tom's Hardware Guide
http://sysdoc.pair.com

SMART Specifications
www.storage.ibm.com/oem/tech/pfa.htm
www.storage.ibm.com/hardsoft/diskdrdl/technolo/drivetemp/drivetemp.htm
www.seagate.com/support/disc/papers/smart.shtml

The SCSI Trade Association
www.scsita.org

Disk Subsystem Performance
www.adaptec.com
www.quantum.com
www.intel.com/design/ipeak

continued from page 88

Teresa Carrigan of Decatur, Illinois, saw the sign, "For lease or build to suit" while picking up her daughter from school. It went to French, Spanish, and German and came back as, "For use or the structure with the complaint."

Richard Coppen in the United Kingdom found this original in a book of postage stamps: "These stamps are valid whatever the current postage rate and may be used for First Class items up to 60g within the UK or up to 20g to countries in the European Union (EU)." After visits to Italian, French, and German, it was "These bubbles are all valid current of kinetics to contresign and can for the first articles of the category of the code to 2' with a maximum the kingdom united by 60 G in or to 20g with the countries in the European link be used (CREDIT them)."

Rev. Walt Snyder in Texas translated from the Lutheran Book of Concord, the Augsburg Confession, Article 4. After several steps he had, "Also it informs to the fact that the man cannot his exclude before God by his clean force, the degree of the operation of transmission, or the work but his excludes freely in inte'ret of Christian d, by the faith of d, if they think that he received his in preference of d, and that you pardon to sins your inside inte'ret of d of the Christian of d, by your death, satisfaction of the form for ours the sins. This God of the faith loads for righteousness in its Vista for above. Novels 3 and 4." Walt adds that he won't be doing much theology by Babelfish.

Finally, Scott Hillman of San Francisco writes:

"Ok. I decided to enter the voice of the fish contest. I translated the following message: 'No Oversized Polynesian-style Bamboo horses were harmed during the production of this motion picture; however, many wicker lawn chairs gave their lives.'

"This from the show *Xena the Warrior Princess* by the way. After 21 translations (English-German-English-Portuguese-English-Italian-English-French-English-Spanish-English-German-English-Portugese-English-Italian-English-French-English-Spanish-English-German-English) I got the following.

"'It is not no horse of large Bambusses of the additional type of Polynesian during the process of this figure of the movement, if even vario the chairs of the basket of the cap of the data signal, not there for the Synopse of the Extension of the life span were to be indicated damaged.'"

Read that aloud for added pleasure.

Is there a serious business point here? I think the moral is that computers are not too good at textual nuance. Before you trust an important document to computer translation, remember what happened to the horse of large Bambusses. ◆

Copyright © 1998 by Birrell Walsh. All rights reserved.

Resources:

The San Francisco Street Project
www.sfsp.org

New York Street Project, with pointers to other Street Projects around the world
www.streetproject.org

Dachshund Underground Railroad
www.geocities.com/Heartland/Prairie/5370/

The Trinity River Community Cooperative
www.snowcrest.net/wildspirit/

Altavista's Translator
http://babelfish.altavista.digital.com/cgi-bin/translate?

continued from page 90

processor-intensive for mail and might take over 95% of your CPU power with a slower server.

When I say mass mail I don't mean "spam," which I hate and do not condone. I mean sending out relevant information to people that actually signed up for it, in which you are honest about your intentions, the email address the mail is coming from, and you personalize the message.

You can't totally remedy this problem, but you can take two steps to minimize the consequences.

• **Schedule Mass Mailings For Off-Peak Hours:** For sites that send out lots of bulk mail, scheduling was made for you.

Scheduling or cron jobs allow a programmer to schedule a task. You can therefore send out mail during off-peak hours when presumably you have some processing power to spare.

Allaire's newest release, Cold Fusion 3.1, has a scheduling feature built-in called CFSCHEDULE—check it out at *www.ingenuity.net/cfdocs/lang/lr020049.htm#I2* .

• **Get A Faster Alternative Mail Server:** If you're using MS Exchange as a mail server for mass emails, you're in for long waits, lots of wasted processing power, and low performance. Though MS Exchange and other bulky mail servers are great for personal and corporate mail, they are generally too large for mass mails.

Keep your current mail server for your corporate mail and have another mail server for your mass mail. Use a more simple mail server like Software.com's Post.Office; you might even try something more vanilla. Bouncing mass mails off a simpler mail server will allow for less overhead and will perform much faster. Mail servers like MS Exchange have sophisticated error checking and usually can't send out more than one or two email messages per second. By contrast, simpler mail servers can send out ten times that.

Of course, if you really want high performance you are going to have to build a custom mail server. PlanetAll (*www.planetall.com*), the contact management site that sends out hundreds of thousands of emails every day, uses a custom made mail server that is awesomely fast. ◆

Copyright © 1998 by Auren Hoffman. All rights reserved.

I like the feature of including the email address the message was sent to at the end of the message. I have over 40 email addresses and most of them forward to the same spot—so it is nice to see what email address I used when I registered at a particular site.

THE BEST VALUE IN THE BAY AREA

- *One Year Parts and Labor Warranty*
- *Systems Burned-In and Tested For 72 Hours*
- *Custom System Configurations Available*
- *Financing Available*
- *Knowledgable Sales and Technical Staff*
- *Fast Turn-Around On Service*

Updated product pricing available at our WWW site **http://www.pixelusa.com**

Now Open at New Location

We have moved to a new 4800 square foot facility that will feature better access and parking!!
One Block West of Highway 280.

STORE HOURS:
Mon.-Fri. 9:30 AM to 7:00 PM
Saturday 10:00 AM to 6:00 PM

intel. Pentium — Best Value

MMX 200MHz — $ 688

- Motherboard AT (Socket 7)
- Intel Triton 430TX Chipset
- 512Kb Cache (Pipelined Burst Sram)
- Intel CPU MMX P5-200MHz
- CPU Cooling kit w/ Heatsink & Fan (Ball Bearing)
- 32Mb Ram EDO 60ns Installed (72-pin)
- Ultra ATA Controller 4HD & 2FD w/ 2s(16550), 1P(EPP)
- Floppy Drive 1.44Mb
- Hard Disk 3.2Gb Ultra ATA (33Mb/s)
- Windows Accelerator PCI w/ 2Mb
- 14" Super VGA Color Monitor (1024 x 768) .28 NI
- Mitsumi 104 Keys Enhanced Keyboard
- Mini Tower Case w/ 230 Watt Power Supply
- Logitech 3 Buttons Mouse
- 24X CD-Rom Drive
- 16-bit Sound Card (ESS)
- Pair of Amplified Speakers 80 Watts
- Windows 95 CD-ROM *Pre-Loaded* Full Version (CD & Manuals)

Intel Pentium MMX 233 MHz $718
AMD K6 MMX 233 MHz $668

intel. Pentium — Best Buy

MMX 200MHz — $ 898

- Motherboard ATX (Socket 7)
- Intel Triton 430TX Chipset
- 512Kb Cache (Pipelined Burst Sram)
- Intel CPU MMX P5-200MHz
- CPU Cooling kit w/ Heatsink & Fan (Ball Bearing)
- 32Mb SDRam 10ns Installed (168-pin)
- Ultra ATA Controller 4HD & 2FD w/ 2s (16550), 1P (EPP)
- Floppy Drive 1.44Mb
- Hard Disk 4.3Gb Ultra ATA (33MB/s)
- Cirrus Logic 5464 PCI w/ 4Mb
- 15" Acer 56C Digital Color Monitor (1280 x 1024) .28 NI
- Keytronic 104 Keys PS-2 Enhanced Keyboard
- ATX Medium Tower Case w/ 235 Watt Power Supply
- Microsoft IntelliMouse PS-2 Mouse
- 24X CD-Rom Drive
- Creative Labs: PCI Ensoniq Audio
- Pair of Speakers (Yamaha YST-M7)
- Windows 95 CD-ROM *Pre-Loaded* Full Version (CD & Manuals)

Intel Pentium MMX 233 MHz $928
AMD K6 MMX 233 MHz $888

intel. Pentium II — Super Value

233MHz — $ 938

- Motherboard Pentium II (Slot 1)
- Intel 440LX Chipset
- 512Kb Cache on Processor
- Intel Pentium II 233MHz
- CPU Cooling kit w/ Heatsink & Fan (Ball Bearing)
- 32Mb SDRAM 10ns Installed (168-pin)
- Ultra ATA Controller 4HD & 2FD w/ 2s (16550), 1P (EPP)
- Floppy Drive 1.44Mb
- Hard Disk 4.3Gb Ultra ATA (33MB/s)
- Windows Accelerator AGP 4Mb
- 15" Sampo 511L Digital Color Monitor (1024 x 768) .28 NI
- Mitsumi 104 Keys Enhanced Keyboard
- ATX Medium Tower Case w/ 235 Watt Power Supply
- Logitec First Mouse PS-2
- 32X CD-Rom Drive
- 16-bit Sound Card (ESS)
- Pair of Speakers 200 Watts
- Windows 95 CD-ROM *Pre-Loaded* Full Version (CD & Manuals)

266 MHz Pentium II $988
300 MHz Pentium II $1,118
333 MHz Pentium II $1,258

intel. Pentium II — Atlanta

233MHz — $ 1,348

- Intel Atlanta Motherboard (Slot 1)
- Intel 440LX Chipset
- 512Kb Cache on Processor
- Intel CPU Pentium II 233MHz
- CPU Cooling kit w/ Heatsink & Fan (Ball Bearing)
- 32Mb SDRAM 10ns Installed (168-pin)
- Ultra ATA Controller 4HD & 2FD w/ 2s (16550), 1P (EPP)
- Floppy Drive 1.44Mb
- Hard Disk 6.4Gb Ultra ATA (33MB/s)
- Matrox Productiva G100 AGP 8MB
- 17" Acer 78IE Digital Color Monitor (1600 x 1200) .26 NI
- Keytronic 104 Keys PS-2 Enhanced Keyboard
- ATX Mid Tower Case w/ 235 Watt P.S
- Microsoft IntelliMouse Mouse PS-2
- 32X CD-Rom Drive
- Yamaha OPL Sound (On-Board)
- Pair of Speakers (Yamaha YST-M15)
- Windows 95 CD-ROM *Pre-Loaded* Full Version (CD & Manuals)

266 MHz Pentium II $1,398
300 MHz Pentium II $1,528
333 MHz Pentium II $1,668

intel. Pentium II — Asus P2B

350MHz — $1,928

- Intel Asus P2B Motherboard (Slot 1)
- Intel 440BX Chipset
- 512Kb Cache on Processor
- Intel CPU Pentium II 350MHz
- CPU Cooling kit w/ Heatsink & Fan (Ball Bearing)
- 64Mb SDRAM 100MHz Installed (168-pin)
- Ultra ATA Controller 4HD & 2FD w/ 2s (16550), 1P (EPP)
- Floppy Drive 1.44Mb
- Hard Disk 6.4Gb Ultra ATA (33MB/s)
- Matrox Productiva G100 AGP 8MB
- 17" CTX VL-710 Digital Color Monitor (1600 x 1200) .26 NI
- Mitsumi 104 Keys Enhanced Keyboard
- ATX Mid Tower Case w/ 235 Watt P.S
- Logitec First Mouse Plus PS-2
- 32X CD-Rom Drive
- Creative Labs: PCI Ensoniq Audio
- Yamaha System 25 w/ Subwoofer
- Windows 95 CD-ROM *Pre-Loaded* Full Version (CD & Manuals)

400 MHz Pentium II $2,158

intel. Pentium II — Seatle

350MHz — $ 2,178

- Intel Seatle Motherboard (Slot 1)
- Intel 440BX Chipset
- 512Kb Cache on Processor
- Intel CPU Pentium II 350MHz
- CPU Cooling kit w/ Heatsink & Fan (Ball Bearing)
- 64Mb SDRAM 100MHz Installed (168-pin)
- Ultra ATA Controller 4HD & 2FD w/ 2s (16550), 1P (EPP)
- Floppy Drive 1.44Mb
- Hard Disk 6.4Gb Ultra ATA (33MB/s)
- Matrox Millenium II AGP 4MB
- 17" Iiyama MT-9017E Digital Color Monitor (1600 x 1200) .25 NI
- Keytronic 104 Keys PS-2 Enhanced Keyboard
- ATX Mid Tower Case w/ 235 Watt P.S
- Microsoft IntelliMouse Mouse PS-2
- 32X CD-Rom Drive
- PCI Audio on-board
- Yamaha System 25 w/ Subwoofer
- Windows 95 CD-ROM *Pre-Loaded* Full Version (CD & Manuals)

400 MHz Pentium II $2,398

USA Pixel

VISA

Pixel USA

(408) 293-8333

810 South Bascom, San Jose, CA 95128

Fax: (408) 293-8353

MasterCard

Prices subject to daily fluctuation. Please call for lastest price. Not responsible for typos.

See our product catalog with manufacturer links at our web site

http://www.pixelusa.com

(we sell web servers too)

MOTHERBOARDS W/O CPU

P5, TX, 512Kb, TX $73
P5, TX, 512Kb, ATX $78

ABIT

TX5 ..... $93
AX5 ..... $93
AH6 ..... $98
LX6 ..... $128
BX6 ..... $173

ASUS

SP97-V $83
TXP4 ..... $108
TXP4-X $118
TX97-LE $118
TX97-X $128
P2L97 ..... $138
P2L97-S ******* w/ Adaptec ******** $218
P2L97-DS Dual PII w/ Adaptec $343
P2B $198
Other ..... $ Call

FIC

VT-503 ..... $78
PT-2011 ..... $108
PA-2007 ..... $98
VA-503 ..... $98
PA-2012 ..... $108
VL-601 ..... $108

intel

Anchorage-1 w/ Audio $123
Atlanta w/o Audio (Box) $158
Atlanta w/ Audio (Box) $173
DK440LX (Box) $458
SE440BX w/ ISA Audio $198
SE440BX w/ PCI Audio $218

TYAN

S1571 Titan Turbo AT-2 ..... $98
S1573 Titan Turbo ATX-2 ..... $98
S1692S Tiger 2 ATX Single $138
S1692DL Tiger 2 ATX Dual $238
S1696DLUA Thunder 2 ATX $438
S1846S PII BX Chipset ..... $ Call
Other ..... $ Call

PROCESSORS

AMD K6-233Mhz (Box) ..... $ Call

Intel P5 MMX 200MHz ..... $ Call
Intel P5 MMX 233MHz ..... $ Call

Intel Pentium II 233MHz (Box) ..... $ Call
Intel Pentium II 266MHz (Box) ..... $ Call
Intel Pentium II 300MHz (Box) ..... $ Call
Intel Pentium II 333MHz (Box) ..... $ Call
Intel Pentium II 350MHz (Box) ..... $ Call
Intel Pentium II 400MHz (Box) ..... $ Call

MEMORY

16Mb EDO 60ns (72-pin) ..... $ Call
32Mb EDO 60ns (72-pin) ..... $ Call
64Mb EDO 60ns (72-pin) ..... $ Call

32Mb SDRAM 10ns (168-pin) ..... $ Call
64Mb SDRAM 10ns (168-pin) ..... $ Call
128Mb SDRAM 10ns (168-pin) ..... $ Call

VIDEO CARDS

Jaton Video-57P PCI 1MB (Trident 9680) $23
Jaton Video-57P PCI 2MB (Trident 9680) $28
Jaton Video-58P PCI 2Mb (ET-6000) $43
Jaton Video-70P PCI 4Mb (CL-GD5464) $38
Jaton Video-61-3D PCI 4Mb (S3 Virge) $38
Jaton Video-87AGP 3D AGP 4MB $43
Jaton Video-87AGP 3D&TV AGP 4MB $48
aton Video-97AGP 3D AGP 4MB $48
Jaton Video-97AGP 3D&TV AGP 4MB $58
Cirrus Logic 5464 PCI 4Mb $28
STB Velocity 128 AGP 4Mb $108
Creative Labs: 3D Blaster PCI 4Mb (Box) $98
Creative Labs: Exxtreme Value PCI 4Mb (Box) $118
Creative Labs: Exxtreme Prof. PCI 8Mb (Box) $178
C. Labs: 3D Blaster Voodoo PCI 8Mb (Box) $218
C. Labs: 3D Blaster Voodoo PCI 12Mb (Box) $278
Other ..... $ Call

DIAMOND
Computer Systems, Inc

Stealth 3D Pro 2000 PCI 2Mb $48
Stealth 3D Pro 2000 PCI 4Mb $58
Stealth 64 3D 3000 PCI 2Mb VRAM $58
Stealth II S220 PCI 4Mb $83
Stealth 3D 4000 AGP 4Mb $63
Stealth II G460 AGP 8Mb $93
Viper 330 PCI 4Mb $88
Viper 330 AGP 4Mb $88
Fire GL 1000 Pro PCI 8Mb $158
Fire GL 1000 Pro AGP 8Mb $168
Monster 3DII PCI 8MB $218
Monster 3DII PCI 12MB $268
Other ..... $ Call

Retail Box Versions

Stealth II S220 PCI 4Mb $93
Stealth II G460 AGP 8Mb $118
Viper 330 PCI 4Mb $138
Monster 3DII PCI 8MB $228
Monster 3DII PCI 12MB $268
Fire GL 1000 PCI 4Mb $98

ATi
TECHNOLOGIES INC
Perfecting the PC

Xpert 98 PCI 8Mb (Box) $83
Xpert 98 PCI 8Mb (Box) $88
Xpert Play 98 PCI 8Mb (Box) $123
Xpert Play 98 AGP 8Mb (Box) $128
3D Pro Turbo PC2TV PCI 4Mb (Box) $78
3D Pro Turbo PC2TV PCI 8Mb (Box) $98
All in Wonder Pro PCI 4Mb (Box) $248
All in Wonder Pro AGP 8Mb (OEM) $258
All in Wonder Pro AGP 8Mb (Box) $298
Other ..... $ Cal

matrox

M3D Game Upgrade (Box) $78
MGA Mystique 220 PCI 4Mb (OEM) $68
MGA Mystique 220 PCI 4Mb (Box) $83
MGA Productiva G100 AGP 8Mb (OEM) $83
MGA Productiva G100 AGP 8Mb (Box) $93
MGA Millenium II PCI 4Mb (OEM) $118
MGA Millenium II AGP 4Mb (OEM) $118
MGA Millenium II PCI 8Mb (Box) $198
MGA Millenium II AGP 8Mb (OEM) $208
Rainbow Runner for Mystique $158
Rainbow Runner for Millenium II $208

MONITORS

14" Super VGA Color Monitor .28 NI $128
15" Super VGA Color Monitor .28 NI $158
17" Super VGA Color Monitor .28 NI $298

Acer

15" 56C (1280x1024) .28 NI w/ Digital Control $198
17" 76E (1280x1024) .28 NI w/ Digital Control $328
17" 78IE (1600x1200) .26 NI w/ Digital Control $358
Other ..... $ Call

iiyama

17" VisionMaster 17 (MT-8617E) $448
17" VisionMaster Pro 17 (MT-9017E) $548
19" VisionMaster 450 (S-901GT) $748
21" VisionMaster 21 (MF-8221E) $1,098
21" VisionMaster Pro 21 (MT 9021E) ..... $ Call

HITACHI

15" SuperScan Pro 500 ..... $248
17" SuperScan Elite 630 ..... $538
19" SuperScan Elite $798
21" SuperScan-Pro CM800 ..... $1,128
Other ..... $ Call

NEC

15" E500 ..... $298
17" A700 ..... $468
17" E700 ..... $558
17" P750 ..... $768
21" P1150 ..... $1,318
Other ..... $ Call

SONY.

15" 100ES $298
17" 200ES $528
19" 400PS $948
21" 500PS $1,298
Other ..... $ Call

ViewSonic®

17" GS771 ..... $418
17" P775 ..... $498
19" G790 ..... $758
20" G810 ..... $978
21" P815 ..... $1,1228
Other ..... $ Call

INTERFACE CARDS

Kowell - 508E Bi-Directional Parallel Card $13
Kowell - 508D-2 EPP & ECP Parallel Card (Dual) $33
Kowell - 2S (16,550) ,1P (EPP & ECP) $23
EIDE ISA w/ Bios 4HD & 2FD 2s (16,550), 1p, 1g $28
EIDE VLB w/ Bios 4HD & 2FD 2s (16,550), 1p, 1g $28
Other ..... $ Cal

Adaptec

2940U Ultra PCI SCSI-2 (OEM) $148
2940UW Ultra Wide PCI SCSI (OEM) $168
2940U Ultra PCI SCSI-2 (Box) $198
2940UW Ultra Wide PCI SCSI (Box) $268
AAA-131 Array Solutions (Box) $398
AAA-133 Array Solutions (Box) $558
Other ..... $ Call

HARD DISKS

IBM

IDE 6.4GB Ultra ATA 9.5ms, 33MB/s $218
IDE 8.4GB Ultra ATA 10ms, 33MB/s $283
SCSI 4.3GB Ultra Wide 8.5ms, 40MB/s $268
SCSI 9.1GB Ultra Wide 7.5ms, 40MB/s $658

FUJITSU

IDE 3.2GB Ultra ATA 10ns, 33MB/s $143
IDE 4.3GB Ultra ATA 10ns, 33MB/s $163
IDE 6.4GB Ultra ATA 9.5ms, 33Mb/s $213
Other ..... $ Call

Quantum®

FireBall SE IDE 4.3GB Ultra ATA, 33MB/s $183
FireBall SE IDE 6.4GB Ultra ATA, 33MB/s $218
FireBall SE IDE 8.4GB Ultra ATA, 33MB/s $298
FireBall SE 6.4GB Ultra SCSI , 20MB/s ..... $ Call
FireBall SE 8.4GB Ultra SCSI , 20MB/s ..... $ Call
Other ..... $ Call

WESTERN DIGITAL

IDE 3.2Gb Ultra ATA (WD-33200) $148
IDE 4.3Gb Ultra ATA (WD-34300) $173
IDE 5.0Gb Ultra ATA (WD-35000) $198
IDE 6.4Gb Ultra ATA (WD-36400) $218
Other ..... $Call

Seagate

4.5GB Ultra Wide SCSI (ST 34572W) ..... $ Call
9.1GB Ultra Wide SCSI (ST 19171W) ..... $ Call
4.5GB Ultra Wide SCSI (ST 34501W) ..... $ Call
9.1GB Ultra Wide SCSI (ST 19101W) ..... $ Call
Other ..... $ Call

FLOPPY DRIVES

1.44Mb (Mitsumi) $16
1.44Mb (TEAC) White $19.98

CD-ROM & CD-R DRIVE

CD IDE Toshiba 24X $58
CD IDE Samsung 32X $58
CD IDE Acer 32X $58
CD IDE Teac 32X $73
CD IDE Toshiba 32X $73
CD IDE Sony 32X $73
CD SCSI Teac 32X $98
CDR HP 7200i IDE (6R, 2W) $388
Creative Labs SCSI (8R, 4W) $378
CDR Yamaha SCSI (6R, 4W, 2RW) Internal $558
CDR Yamaha SCSI (6R, 4W, 2RW) External $638

CASE & POWER SUPPLY

Mini tower Case + 230 W.P.S $23
Desktop AT Case + 230 W.P.S $25
Super Mini tower Case + 230 W.P.S $28
Medium tower Case + 230 W.P.S $38
Full tower Case + 250 W.P.S $58
Asus T5 ATX Tower Case w/ P.S $73
Asus T10 ATX Tower Case w/ P.S $83
Acer ..... $ Call
Irwin ..... $ Call
Gigastar ..... $ Call
Other ..... $ Call

MODEMS

DIAMOND

Supra Max PCI 56Klex Internal (OEM) $63
Supra Express ISA 56Klex Internal (OEM) $68
Supra Express 56Klex Internal (Box) $73
Supra Express 56Klex V.90 Internal (Box) $98
Supra Express 56Klex V.90 External (Box) $118
Other ..... $ Call

US Robotics

Sporter 5687 56K V.90 Internal (Box) $133
Sporter V.90 5686 External (Box) $153
Sporter 1786 56K External (Box) $138
Sporter Voice 1784 56K External (Box) $143
Sporter ISDN 128K Internal (Box) $183
Other ..... $ Call

MICE

OEM Logitech Products sold with system only

Logitech First Mouse Serial (OEM) $8
Logitech First Mouse PS-2 (OEM) $8
Logitech MouseMan Serial (OEM) $15
Logitech MouseMan Combo (OEM) $18
Logitech First Mouse + (OEM) $15
Logitech TrackMan Marble (OEM) $38
Logitech Cordless MouseMan Pro (OEM) $38
Logitech MouseMan 96 (Box) $35
Logitech MouseMan Notebook (Box) $35
Logitech MouseMan + (Box) $43
Logitech Cordless MouseMan Pro (Box) $58
Logitech TrackMan Marble (Box) $58
Genius NetMouse (Box) $8
Genius NetMouse Pro (Box) $13
Other ..... $ Call

Microsoft Products sold with system only

Microsoft Natural Keyboard $38
Microsoft Serial Mouse (Ergonomic) $18
Microsoft IntelliMouse Serial (Ergonomic) $23
Microsoft IntelliMouse PS-2 (Ergonomic) $28
Windows 95 OSR2 ..... $88
Other OEM Products ..... $ Call

ACCESSORIES

Logitech WingMan Joystick Digial (Retail Box) $38
Logitech WingMan Joystick Warrior (Retail Box) $68
Mitsumi 104 Keyboard $13
HP Colorado T3000 Travan 3.2Gb $158
HP Coloradao T4I SCSI Tape Back up $358
Speakers 80 Watts $8
Speakers 200 Watts $23
Speakers 300 Watts $43
Yamaha YST-M7 (5 Watts per channels) $33
Yamaha YST-M15 (10 Watts per channels) $58
Yamaha System 25 ..... $83
Yamaha Subwoofer $83
Sound 16 3D P&P (ESS Chipset) $15
Sound Blaster 16 P&P (Asus) $28
Other ..... $ Call

CREATIVE
CREATIVE LABS, INC.

Sound Blaster 16 P&P (OEM) $33
Sound Blaster Ensoniq PCI (OEM) $38
Sound Blaster AWE64 Value P & P (OEM) $63
Sound Blaster Gold AWE64 P & P (Box) $138
Performance AWE 64 DVD DRX2 (Box) $208
PC-DVD Encore-2 DXr2 ..... $273
3D Blaster Voodoo PCI 8Mb (Box) $218
3D Blaster Voodoo PCI 12Mb (Box) $273

USA Pixel

Pixel USA

(408) 293-8333

810 South Bascom, San Jose, CA 95128

Fax: (408) 293-8353

VISA

MasterCard

Prices subject to daily fluctuation. Please call for lastest price. Not responsible for typos.

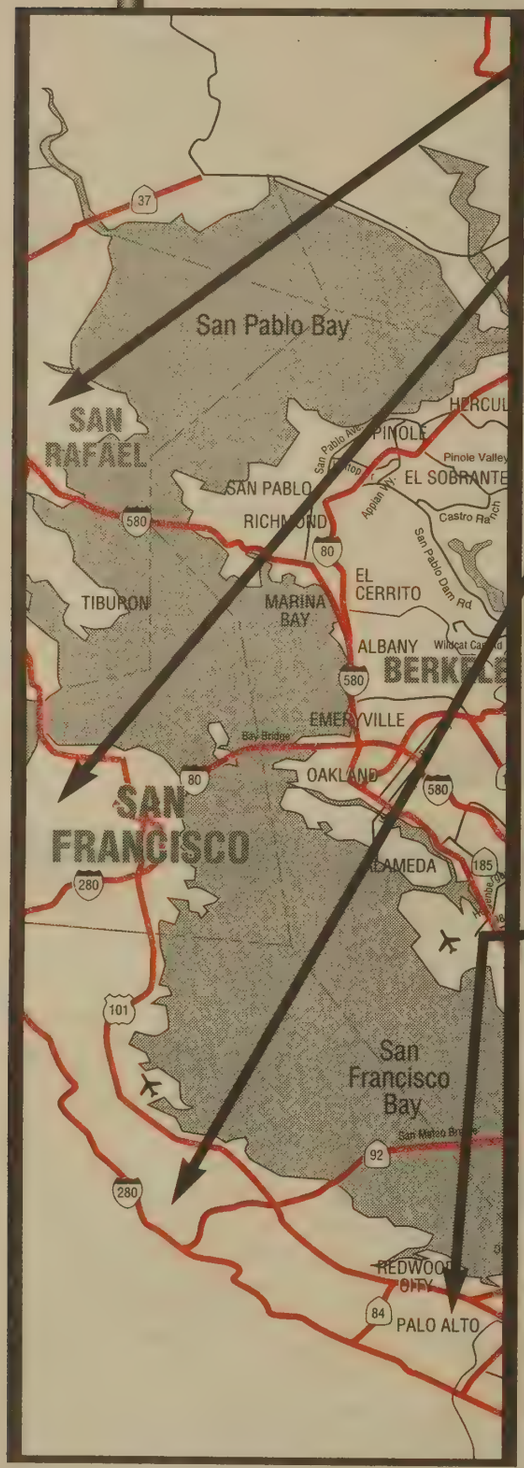
See our product catalog with manufacturer links at our web site

http://www.pixelusa.com

(we sell web servers too)

MICROTIMES SUPER STOPS

No Matter Where You Are – *MicroTimes* Is There For You!



MARIN

BCSA COMPUTERS • 385 Bel Marin Keys • Novato • (X Street: Gali)
HIQ SYSTEMS • 850 Sir Francis Drake Blvd. • San Anselmo • (X Street: 4th St.)

SAN FRANCISCO

BETA NINETIES • 566 Mission St. • San Francisco • (X Street: New Montgomery)
CENTRAL COMPUTER • 835-837 Howard St. • San Francisco • (X Street: 4th St.)
COMPUData • 22 Third St. • San Francisco • (X Street: Market)
HD COMPUTER • 232 Montgomery St. • San Francisco • (X Street: Bush)
HI-TECH USA • 850 Taraval St. • San Francisco • (X Street: 19th St.)
KONICOM COMPUTERS • 1443B Noriega St. • San Francisco • (X Street: 22nd St.)
SOFTWARE CENTER PLUS HARDWARE • 501 Howard St. • San Francisco • (X Street: 1st Street)
STARLITE ELECTRONICS • 2121 Taraval St. • San Francisco • (X Street: 31st)
UMIRACLE MICROSYSTEMS • 1528 Union Street • San Francisco • (X Street: Van Ness)

PENINSULA

COMPUTER RENAISSANCE • 280 Metro Center • Colma • (X Street: Serra)
DISK DRIVE DEPOT • 914 W. El Camino Real • Mountain View • (X Street: Arques)
HI-TECH USA • 111 E. 5th Ave. • San Mateo • (X Street: S. San Mateo)
HI-TECH USA • 441 El Camino Real • Menlo Park • (X Street: Middle Ave.)
IBI COMPUTERS • 551 Foster City Blvd., Suite N • Foster City • (X Street: Hillsdale)
IQ INFOQUEST • 4500 El Camino Real • Los Altos • (X Street: San Antonio)
LAITRON COMPUTER • 39 El Camino Real • Millbrae • (X Street: Millbrae Ave.)
STARLITE ELECTRONICS • 1161 Chess Dr., Suite D • Foster City • (X Street: Foster City Blvd.)

SOUTH BAY – WEST

AMERICAN COMPUTER RESEARCH • 1001 S. DeAnza Blvd. • San Jose • (X Street: Bollinger)
AROMA COMPUTER • 470 Lakeside Dr. • Sunnyvale • (X Street: Oakmead)
CENTRAL COMPUTER • 3777 Stevens Creek Blvd. • Santa Clara • (X Street: Saratoga)
DISK DRIVE DEPOT • 500 Lawrence Exp. • Sunnyvale • (X Street: Arques)
HALTED SPECIALTIES • 3500 Ryder St. • Santa Clara • (X Street: Central Exp.)
HD COMPUTER • 988 Walsh Ave. • Santa Clara • (X Street: Lafayette)
HIQ COMPUTERS • 740 N. Mary Ave. • Sunnyvale • (X Street: Maude)
HI-TECH USA • 730 E. El Camino Real • Sunnyvale • (X Street: Wolfe Rd.)
HKG COMPUTERS • 448 E. El Camino Real • Sunnyvale • (X Street: Fair Oaks)
KINGSTAR COMPUTERS • 855 Kifer Rd., Suite B • Sunnyvale • (X Street: Central Exp.)
MICRO-SONIC COMPUTERS • 3052 Scott Blvd. • Santa Clara • (X Street: Space Park)
CYBER TEK • 14530 Camden Ave. • San Jose • (X Street: Leigh)
MONITOR EXPRESS • 530 Lawrence Exp. • Sunnyvale • (X Street: Arques)
SWEET MEMORY • 2450 Scott Blvd. • Santa Clara • (X Street: Martin)
TRUE COMP AMERICA • 1264 S. Bascom Ave. • San Jose • (X Street: Stokes)
UNITED MICROSYSTEMS • 1180 Miraloma Way, Bldg. L • Sunnyvale • (X Street: Central Exp.)
WEIRD STUFF WAREHOUSE • 384 W. Caribbean Dr. • Sunnyvale • (X Street: Mathilda Ave.)

Call *MicroTimes* for a "Super Stop" Location Near You! 510-768-1200

MicroTimes™ Super Stops*

CONTRA COSTA

AIM COMPUTER • 1819 Willow Pass Rd. • Concord • (Park & Shop)
COMPUMART • 1320 S. California • Walnut Creek • (Next to Strouds)
EVERGREEN • 2700 Rydin, Suite C • Richmond • (X Street: Central Ave.)
LAITRON COMPUTER • 508 Contra Costa Blvd. • Pleasant Hill • (X Street: 2nd Ave.)
PARAMOUNT COMPUTER • 1630 Contra Costa Blvd., Suite D • Pleasant Hill • (X Street: Doray)
PERFECT SOLUTION • 10032 San Pablo Ave. • El Cerrito • (X Street: Central Ave.)

EAST BAY – NORTH

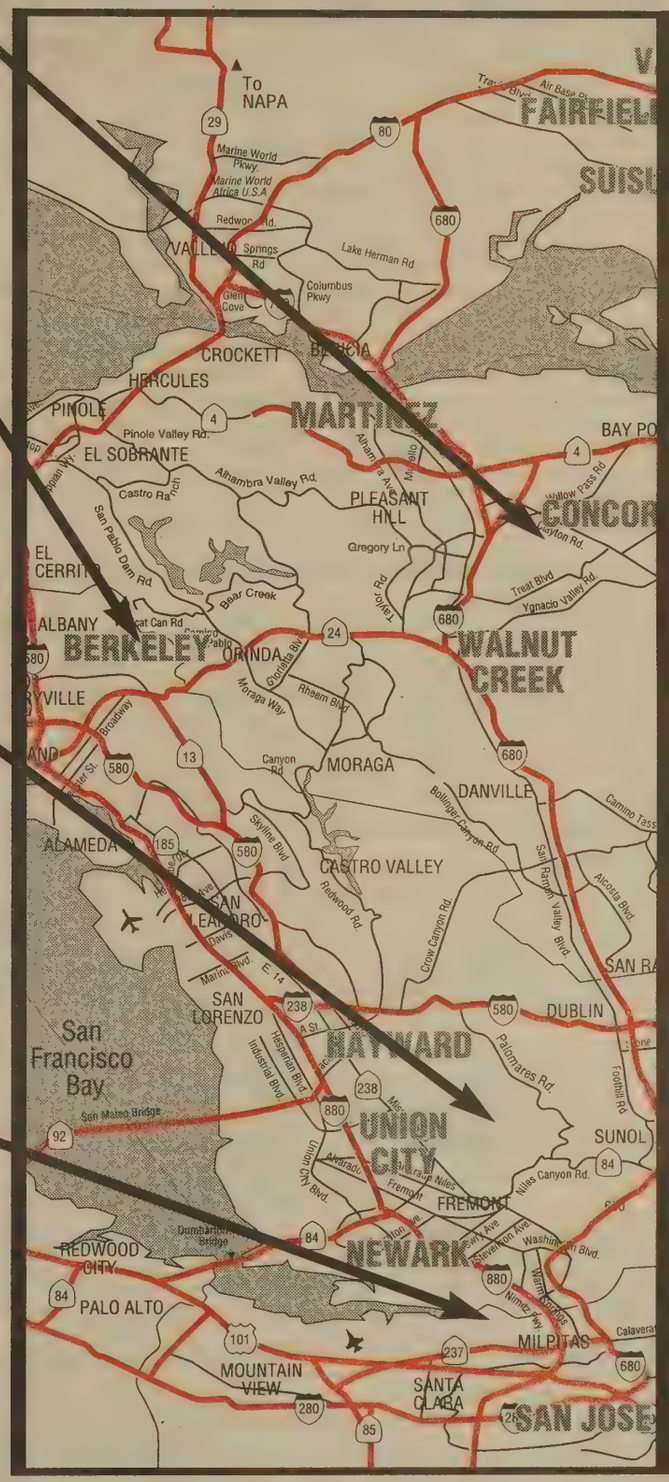
COMPUTER SOURCE • 518 San Pablo Ave. • Albany • (X Street: Brighton)
DJ COMPUTER • 926 San Pablo Ave. • Albany • (X Street: Solano)
HI-TECH USA • 2318 Shattuck Ave. • Berkeley • (X Street: Bancroft Way)
MAC • 2010 Shattuck Ave. • Berkeley • (X Street: University)
MERCURY COMPUTER • 1733 Broadway • Oakland • (X Street: 17th)
PC TEN • 4237 Piedmont Ave. • Oakland • (X Street: Pleasant Valley Way)
UMIRACLE • 1035 San Pablo Ave. • Albany • (X Street: Main)

EAST BAY – SOUTH

CENTRAL COMPUTER • 5990 Mowry Ave. • Newark • (X Street: Cedar)
COMTEK COMPUTERS • 6602 Dublin Blvd. • Dublin • (X Street: Hopyard)
GOLDEN MICRO • 46560 Fremont Blvd., Suite 408 • Fremont • (X Street: Warren)
LAITRON COMPUTER • 24901 Santa Clara St. • Hayward • (Gateway Shopping Center)
NCAL • 4847 Hopyard Rd. • Pleasanton • (X Street: Stoneridge)
SOFT SOLUTIONS • 6997 Dublin Blvd. • Dublin • (X Street: Hopyard)
UMIRACLE • 44063 Fremont Blvd. • Fremont • (X Street: AutoMall)
USM • 43104 Christy St. • Fremont • (X Street: AutoMall)
WEIRD STUFF SOFTWARE • 46577 Mission Blvd. • Fremont • (X Street: Warm Springs)

SOUTH BAY – EAST

AMERICAN MULTISYSTEMS • 1830 Houret Ct. • Milpitas • (X Street: Montague Exp.)
ART MULTIMEDIA SYSTEMS INC. • 424 S. Main St. • Milpitas • (X Street: Serra)
CHICOTEC • 542 W. Trimble Rd. • San Jose • (X Street: Hwy. 101)
HI-TECH USA • 1558 & 1562 Centre Pointe Dr. • Milpitas • (X Street: Montague Exp.)
LAITRON COMPUTER • 1550 Montague Exp. • San Jose • (X Street: Old Oakland Rd.)
LAITRON COMPUTER • 1080 Blossom Hill Rd., Suite D • San Jose • (X Street: Almaden Exp.)
MONITOR EXPRESS • 689 East Brokaw Rd. • San Jose • (X Street: Junction)
PIXEL USA • 810 S. Bascom Ave. • San Jose • (X Street: 280 Fwy.)
WORLD NET • 1503 N. Milpitas Blvd. • Milpitas • (X Street: Dixon)



*Super Stops: Locations that are restocked frequently with copies of ***MicroTimes*** throughout the month.

MicroTimes™
www.microtimes.com

COMPU-D
International, Inc.
800-929-9333
compu-d.com

Apple
PB.1400C/166
603e/166, 16/2GB, 8xCD
$1,685

NEW PB. G3/250	PPC750	5GB	32MB	20xCD	$3,955
PowerBook 3400C	603e/240	3GB	16MB	12xCD	$2,595
PowerBook 5300CS	603e/117	500MB	8MB	.....	$765
PowerBook 5300CS	603e/117	2GB	16MB	.....	$1,045
PowerBook 2400C	603e/180	1.3GB	16MB	.....	$1,595
PowerBook 1400C	603e/166	5GB	64MB	CD	$2,250
PowerBook 1400cs	603e/166	1.3GB	16MB	12xCD	$1,495

NEW PowerMac G3 Desktop 233MHz 32/4GB, 24xCD ___ $1,485
NEW PowerMac G3 Minitower 233MHz 32/4GB, CD, 56K _ $1,695
NEW PowerMac G3 Desktop 266MHz 32/4GB, CD, Zip ___ $1,695
NEW PowerMac G3 Minitower 266MHz 32/6GB, CD, Zip __ $2,145
NEW PowerMac G3 Minitower 266MHz 128/4GB, CD, 8MB $3,095
Apple DOS Card Pentium 166MHz for all G3 & PCI PowerMacs __ $489

PowerMac 4400/200	603e/200	2GB	32MB	12XCD	$995
PowerMac 8600/300	604e/300	4GB	32MB	24XCD	$1,795
PowerMac 7300/180	604e/180	2GB	32MB	12XCD	$1,295
PowerMac 9600/300	604e/300	4GB	64MB	24XCD	$2,295
PowerMac 9600/350	604e/350	4GB	64MB	24XCD	$2,695
PM. 9600/200MP	604e/200	4GB	32MB	12XCD	$1,795

COMPAQ
Armada 4131T
P133, 16/1.4GB, 12.1" TFT
$1,150

Armada 7790DMT	P233MMX	32/5GB, CD	13.3"TFT	$3,595
Armada 7770DMT	P233MMX	32/3GB, CD	12.1"TFT	$3,195
Armada 7750MT	P166MMX	16/2.1GB	12.1"TFT	$2,195
Armada 7330MT	P150MMX	16/2GB	12.1"TFT	$1,329
Armada 4150	P150MMX	16/1.6GB	12.1"DSTN	$1,095
Armada 1550DMT	P133MMX	16/1.4GB	12.1"TFT	$1,450
Presario 1681	233MMX	48/3.2GB, CD	12.1"TFT	$2,499
Presario 1220	200MHz	32/2.1GB, CD	12.1"DSTN	$1,695
LTE 5280	P120	16/1.3GB, CD	11.3"TFT	$1,095

$395

Authorized Reseller & Service Center
TOSHIBA
T-510CDT P133, 16/2.1GB, 12.1" TFT, 10xCD
$1,225
3 year warranty

Libretto 50CT	P75	16/770MB	6.1"TFT	$669
Libretto 70CT	P120	16/1.3GB	6.1"TFT	$1,490
Libretto 100CT	P166MMX	16/1.35GB	7.1"TFT	$2,295
T-300CT	P166	32/1.51GB	10.4"TFT	$1,449
T-470CDT	P233MMX	32/2GB	12.1"Active	$2,395
T-480CDT	P233MMX	32/4GB	12.1"TFT	$2,579
T-550CDT	P266MMX	32/4GB	12.1"TFT	$3,590
T-730XCDT	P150MMX	16/2.1GB	12.1"TFT	$1,415
T-740CDT	P166MMX	16/3.0GB	13.3"TFT	$2,275
T-750CDM	P233MMX	32/4.7GB	13.3"TFT	$4,550
T-750DVD	P233MMX	32/4.7GB	13.3"TFT	$4,480

T-440CDX* P133MMX, 16/1.35GB, 12.1" DSTN, 10xCD $995
T-440CDT* 12.1" TFT, 10xCD $1,290

Hewlett Packard Printers

LaserJet 5M/5MP 600dpi, PSL2	$1,345/595
LaserJet 5/5N/5M*/5MP*	$895/1,149/1,245/495
LaserJet 4000T*/4V*/6L	$1,095/1,199/339
LaserJet 6P*/6P/6PXi/6MP	$595/670/689/815
LaserJet 4V/4MV 16ppm, 11x17"	$1,295/1,975
Laser 5000/5000N/5000GN	$1,385/1,845/2,495
EPSON 800/880/3000 Stylus	$239/335/1,635

Blowout Blowout
LaserJet 4000 Series
17ppm, 1200dpi

4000 4MB	$1,025
4000T 4MB	$1,175
4000N 6MB	$1,349
4000TN 6MB	$1,475

We offer a wide selection of Name Brand Desktop Computers & Peripherals
e-mail:csales@cmpu-d.com
Fax:(818)787-5555
DHL FedEx Same Day Shipping
6741 Van Nuys Blvd., Van Nuys, CA 91405
Tel:(818)-787-1054

continued from page 56

Telecommute '98

Gil Gordon's annual conference on telecommuting is now scheduled for The Renaissance Harborplace Hotel in Baltimore, MD, during June 21-24, 1998.

The list of topics includes: New approaches to cost-benefit analysis, managing and avoiding the risks of working at home, breaking through the barriers to corporate culture change, a presentation of Boeing's telecommuting program, using intranets successfully with telecommuters, improving remote-management skills, tools for remote-collaboration, and using telecommuting to ease a staffing crisis.

Whites were more than twice as likely to be engaged in some form of home-based work as either Blacks or Hispanics.

For more information, check the conference's Web page at: *www.telecommuteconference.com* , or call 1-800-854-0056. ◆

Copyright © 1998 by Robert Moskowitz. All rights reserved.

Reader Response To Telecommuting Article:

To The Editors of *MicroTimes*,

I am writing to express my disappointment in an article in your issue of March 27, 1998. This article, referencing my company, VirtualStaff LLC, is incorrect. In addition, no one from your magazine, including the author of the article, Robert Moskowitz, ever contacted myself, or anyone on my staff, regarding the facts of this story.

The article in question, "Telecommuting To A Job Interview," appears on page 50 of the above referenced edition. The article states that my company has a relationship with Cornell University, and that we team with them to conduct online staffing in computer labs all across the country. The facts are VirtualStaff LLC has never had a relationship with Cornell, and we have no program with them covering, "Electronic Staffing," in computer labs.

Several associates and friends who have seen this article counseled me not to take issue with you regarding this, stating that inaccurate publicity is still publicity. I disagree. I believe that good publicity must also be accurate.

Please take the necessary steps to correct these inaccuracies. Thank you.

Truly yours,
Brian Kane
CEO, VirtualStaff LLC

Robert Moskowitz replies:

You're absolutely correct. Apparently I confused my notes about VirtualStaff LLC with my notes about another company for another article. I sincerely apologize and hope not to have caused you any difficulties.

This probably won't provide any solace, but I tend to agree with your associates and friends, and would like you to note that at least I spelled your company's name mostly correct.

Good luck to you in the future.

Robert Moskowitz

Advertise in *MicroTimes* Classifieds and Let Us Help Your Business GROW. We Offer Advertisers:

- **Over 128,000 Copies Distributed in Northern California**
- **A Range of Sizes and Prices to Meet Your Needs**

MicroTimes. CLASSIFIEDS

With *MicroTimes* Classifieds, Find What You Need FAST. We Offer Computer Consumers:

- **Over 200 Advertisers to Choose From**
- **Convenient Organization by Category for Quick Comparison**
- **Hard-To-Find Specialty Services**
- **Great Deals on Hardware, Software, and Accessories**
- **Career Opportunities**

Bar Coding 190
Business Opportunities 190
Cartridge Refills 190
Data Conversion 190
Data Recovery 190-191
Hardware 191
Hardware Wanted 191
Internet 191-192
Investigative Services 192
Media Duplication 192-194
Media Supplies 192-195
Printer & Computer Supplies 195-196
Repairs 193-199
Software 196

Consultants' Network –
General 199-200
LAN 200
Programming 200-201

Career Marketplace –
Career Opportunities 201-202
Training 202-204

Deadline

for advertising in the June 17, 1998 issue of *MicroTimes* Classifieds is **May 29, 1998**

Call **Larry Nusbaum** at **1-888-678-8479** to place your ad.

HOW TO PLACE YOUR CLASSIFIED AD

MINI DISPLAYS
1 column unit = 1-1/4"(w) x 3/4"(h). $60 per column unit for digitally supplied art. We also offer production and design services.

COLOR
Full color is now available for classified advertisements. Prices vary based on ad size and number of colors.

BUSINESS ADS
Rates are $20 for the first 15 words, $1 for each additional word. A centered, bold headline is available for just $10 more — really get their attention!

CATEGORIES
Choose the classification that best describes your product or service, or create a category specific to your needs.

FREQUENCY DISCOUNTS
Ask us about discount rates for multiple insertions.

CATEGORIES
- ❍ Accessories
- ❍ Bar Coding
- ❍ Bulletin Boards
- ❍ Business Opportunities
- ❍ Capital Available
- ❍ Cartridge Refill
- ❍ CD-ROM
- ❍ Data Conversion
- ❍ Data Recovery
- ❍ Duplicator Hardware
- ❍ Finance
- ❍ Hardware for Sale
- ❍ Hardware Wanted
- ❍ Instructional Videos/ CD-ROMs
- ❍ Other_____
- ❍ Internet
- ❍ Media Duplication
- ❍ Memory
- ❍ Personals
- ❍ Repairs
- ❍ Services
- ❍ Software
- ❍ Training

Consultants' Network
- ❍ Business
- ❍ General
- ❍ LAN/Networking
- ❍ Programming

Career Marketplace
- ❍ Career Opportunities
- ❍ Training

Ad Copy: _____

Cost of Ad_____ x Number of Issue(s) to Run_____= Amt. Enclosed _____

❍ Check/MO ❍ MasterCard/Visa Card # _____ Exp. Date _____

Name _____

Address _____

City _____ State_____ Zip _____

Phone_____ Fax _____

***MicroTimes* Classifieds • 1300 Clay Street • Suite 820 • Oakland, CA 94612**

PLACE YOUR ORDER TOLL-FREE BY CALLING 888-678-8479

BAR CODING

BARCODING
For all your Barcode needs call
1-888-560-2726

We Specialize in:

Reselling: Laser Scanners, Barcode Readers, Barcode Printers and Custom Labels.

Over 10 years in Barcode Business

Software: Custom Barcode Software Application on Windows NT with Microsoft SQL and VB 5.0.

vidya data systems
ph# 415-661-7780 fax# 415-661-7782

Just Plug & Scan! No Software Required!

Stainless steel wand equipped with decoder

Just point and click! No contact necessary

Ideal for reading id's of students, members, etc.

Read credit card or driver's license

- Laser Gun Scanner $395
- Driver's License Reader $245
- Cash Drawer $195
- Portable Data Collector $595

For shipping/receiving/inventory

- Credit Card Reader $195
- Bar Code Printing S/W $145
- Receipt Printer $295
- Magnetic ID Card Encoder $795

Make/Duplicate your own ID cards

We interface to AT/Laptop, Mac, DEC & Terminal like WYSE via keyboard or serial port.

1-888-BAR-7250

BARCODE TECHNOLOGIES INC. (408) 956-9971/FAX: (408) 956-0506
1619 South Main Street, Milpitas, CA 95035

DATA CONVERSION

DataTek CONVERSION SYSTEMS
- DLT
- 9 Track Magnetic Reel
- 1/4" • 3480 • 3940E
- TK50/87 • 4mm • 8mm
- Zip • Jaz • MO • CD
- 3 1/2" • 5 1/4" • 8"

ALL FORMATS
3435 Cerritos Ave., Los Alamitos, CA 90720
(562) 430-0048
800-422-0307
http://members.aol.com/converter9

DATA RECOVERY

Remote Data Recovery
Ontrack.
THE WORLD LEADER IN DATA RECOVERY SERVICES

- ONTRACK can recover data lost due to: data corruption, mechanical failure, electrical surge, human error, virus infection, water and fire damage.
- Expertise in virtually every operating system & media storage device.
- ONTRACK now has a full-service data recovery facility in San Jose & Costa Mesa!

1.800.872.2599
www.ontrack.com
940 South Coast Drive, Suite 225, Costa Mesa, CA 92626 • 714.641.0530
2001 Gateway Place, Suite 750 West, San Jose, CA 95110 • 408.573.9592
©1997 Ontrack Data Recovery, Inc.

DATA RECOVERY TECHNOLOGY
data recovery in hours

MAC, IBM, COMPAQ, SUN, DOS, NOVELL, UNIX, LAN, OS/2 and more!

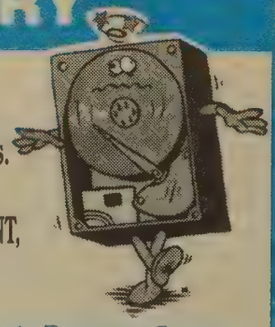
- ✓ 10 years experience in recovering lost, damaged and inaccessible data from any operating system or storage media
- ✓ you only pay when there's a successful recovery

FREE ESTIMATES • LOW RATES
888-511-data
1-408-248-1887
5029 Stevens Creek Blvd., Santa Clara, CA 95051

Great Values & Hard-to-Find Services
Call Larry Nusbaum: **510-768-1200**
MICROTIMES CLASSIFIEDS

DATA RECOVERY

- Data Recovery is our only business.
- We have been recovering data since 1987. Our customer list includes over 5000 companies.
- We specialize in recovering data from failed hard drives using: DOS, MAC, WINDOWS NT, NOVELL, UNIX, VMS.



Bay Area
DRG *Your Data Recovery Specialists*
510-347-1010

Data Recovery Group
1821 Marina Blvd.
San Leandro, Ca. 94577
fax (510) 347-4799
www.datarecoverygroup.com

DATA RECOVERY
Lost your data? Don't panic, CALL!

✓ 24-Hour ✓ Weekend
800-886-2231
No Data... No Charge
✓ Priority ✓ On-site

- DOS
- Windows 95 & NT
- Mac
- Novell
- UNIX
- OS/2
- Virtually all operating systems
- Competitive prices
- Clean-room facilities

visit our Web site www.datamechanix.com
DATA MECHANIX 18271 McDurmott, Suite B, Irvine CA 92714
Telephone: 714-263-0994 Facsimile: 714-263-1549

DATA RECOVERY
Low Cost
Job Guaranteed
Quick Turnaround
DATA-ONE Since 1987
(408) 434-1002
938 Rincon Cir., San Jose Mon-Fri 9-5 pm
(Montague Express & Hwy. 880)

Data Recovery in hours.

- Over 10 years of experience with clients worldwide including Apple, NASA, & FedEx.
- We've recovered more than Half-a-million megabytes of lost data.
- You only pay when there's a successful recovery.
- Call 24 hours a day.

LAZARUS DATA RECOVERY
Working at the Speed of Business
800-341-DATA
415-495-5556 • FAX 415-495-5656 • RESTRICTIONS MAY APPLY
381 Clementina Street • San Francisco, California 94103

BUSINESS OPPORTUNITIES

COMPUTER ROOM RENTALS

12 and 16 computer rooms available. T-1 connection, Pentium 133s, & 200s. Upgrades available. State of the art facility. Professional, service-oriented company. Call Alex at **408-866-8033.**

BAR CODING

Barcode Solutions 1-415-661-7780 VIDYA DATA SYSTEMS. Increase productivity and efficiency.

BARCODE TECHNOLOGIES, INC. We interface to AT/Laptop, Mac, DEC & Terminal like WYSE via keyboard or serial port. **1-888-BAR-7250.**

CARTRIDGE REFILLS

Laser & Copier Toner Cartridges Remanufactured

HP, Apple, IBM, Xerox, Others. Sharp, Canon, Xerox Copiers. SALE!!! HP II, III with NEW DRUM $39.95 CLEMENT ENTERPRISES **800-974-8789**

DATA CONVERSION

DATATEK CONVERSION SYSTEMS - We convert from Magnetic Tape Reels, Cartridges, Diskettes, MOs & CDs to all formats. Fast, professional service. **Call: 800-422-0307, http://www.members.aol.com/converter9**

DATA RECOVERY

Data Recovery is our only business since 1987. 510-347-1010.

Data recovery. Systems Services & Upgrades. DATA RECOVERY TECHNOLOGY **888-511-DATA**

HARDWARE

Professional PC, Mac, Sun, Sgi, & Radius Monitors Repair. MONI-COMP TECH. 408-254-3746

PC Monitors for Sale. 17" $299, 20" $399. 6-month warranty. MoniServe, Inc. **1-888-785-7288.** http://www.moniserv.com.

$$$Top Cash Paid$$$ We buy small and large quantities of new/used/ surplus SIMMs/Hard Drives/ CPUs/ SOJs. Call Ted to make a deal today! Pager 408-366-5665 or work 408-252-1839.

IBM ThinkPad 500 notebook; Iomega Transportable 150 MB drive + 5 disks; Intel SatisFAXtion 14,400 fax/modem; voice/fax/data switch; credit-card size wireless PC remote-control. 415-567-8278 or 73677.3306@compuserve.com.

INTERNET

WEB SITE DESIGN

WEB-SITE Development - Low Cost Design; 3D Graphics, Programming. WEB-SITE Management-Updated & Improvement Site; Site Maintenance (web hosting services available) **Sunnygraphics http://www.sunnygraphics.com 408-954-8777**

eLine Productions

Since 1993. 415-543-0760. A Web Applications & Database Development Company. Full development, design, hosting, and consulting services. Creators of SmartConf®, BasiChat® & Gutenberg 2000®. See our client list on-line: www.eline.com

DON'T BE LEFT OUT!

I'll connect you to the Internet. Plans available from as little as $13.95/mo. Call the Peterson Group now: **888-901-8012. http://www.flash.net/~petergrp**

DATA RECOVERY

data recovery

Whether data is needed NOW or years down the road, MicroCom can make it happen. For years, businesses have relied on us to come through for them, we did, and we can do the same for you. Call for more information.

MICROCOM

www.mcrecovery.com • 818 718-1200 • 818 718-1485 Fax

800 469-2549

Reach New Customers with

MicroTimes CLASSIFIEDS

Call Larry Nusbaum **(510) 768-1200**

HARDWARE WANTED

Network
- EQUIPMENT
- CARDS
- HUBS

WANTED

IBM • 3COM • INTEL
SMC • Madge • Adaptec
Olicom • HP Jet Direct
Cisco • Synoptics

★ *PLUS EXCESS* ★
COMPUTER INVENTORIES

JE COMPONENT
(310) 828•0094
fax: (310) 828•4184

HARDWARE

USED COMPUTERS Bought & Sold

(415) 346-1692

- Laptops
- Desktops
- Parts

Top Dollar Paid

WARRANTY ON ALL COMPUTERS SOLD!

Personal Computers For Less
10th Year in Business

PROFESSIONAL PC, MAC, SUN, SGI & RADIUS MONITORS REPAIR

• Will beat all competitors' prices. • Free pickup & delivery (local).
• Free loaner available. • Manufacturer & dealer 10% discount.

REFURBISHED & USED MONITORS SALE

VGA 14 inch	$70
SVGA 14 inch	$85
SVGA 15 inch	$150
SVGA 17 inch	$280
SVGA 19 inch	$399
WYSE Terminal	$120
SUN & MAC	$Call

PC COMPONENT SALE

512K INTEL CHIPSET M/B	$80
4X SCSI REFURBISHED	$40
1M CIRCUIT LOGIC VIDEO	$29
CPU, HDD, MEM	$Call

MONITOR SERVICE (FLAT RATE)

14-15 inch	$45
16-17 inch	$90
19-21 inch	$150
WYSE Terminal	$45
BIG SCREEN SUN, MAC, RADIUS FROM	$160

MONI-COMP TECH.
Nation-Wide Monitors, Terminals, PC Sales & Service

1710 Berryessa Road, #114, San Jose, CA 95133
(408) 254-3746 • Fax (408) 254-3634

HARDWARE WANTED

$ TOP DOLLAR PAID $
CPU, MEMORY & HARD DRIVES

All Computer Equipment & Manufacturers
Surplus, Overstock, Liquidations, Wholesale

BUY & SELL • NEW & USED

The Computer Connection

(888) 517-1607
(619) 420-4587
Fax (619) 420-4588
computerconnect@home.com

Visit our website: www.computerconn.com

HP, Sun
Digital PC
Mac Peripherals
Microsoft Software

TOP CASH PAID!

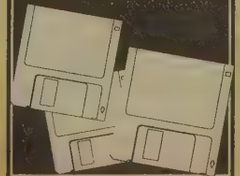
For all Notebooks, Desktops, Monitors, Printers, Scanners, Parts & Accessories.

New, Used & Refurbished O.K.!

Fax to: Mr. Chernow @ (213) 724-2200
or call: (213) 724-1800

INTERNET

We Buy Used Diskettes.
1-800-798-DISK



We make accessing information as easy as talking

Inter & Intranet Client/Server
Consulting & Implementation

Our expertise is in:
- Web Integration
- ORACLE: SQL Server
- UNIX, NT, Novell
- PowerBuilder LotusNotes Developer 2000
- C, C++
- HTML, JAVA, CGI

DataTalk Incorporated

Phone #: (650) 842-9960
www.datatalk-ca.com

I'll Connect You to the Internet
Unlimited Internet Access ~ $13.95
Independent FlashNet Representative:
The Peterson Group
petergrp@flash.net • http://www.flash.net/~petergrp
Toll Free: 1.888.901.8012
TM *When prepaid on annual plan. Other plans available

IMMIGRATION
Law Offices of Paul M. Heller
Labor Cert. & Work Visas • Individual, Bus. & Corp. Clients
(415) 291-8000
http://www.greencard1.com
e-mail: heller@greencard1.com

INTERNET

Graphic Design Concepts
www.gdcweb.com

If supplementing your advertising and increasing your exposure would help potential customers know where you are, what you do and how to reach you...

2971 Kentridge Dr.
San Jose, CA 95133

Contact us!

Ph. 408-937-4630
Fax 408-926-6479

Web Site Development

AS LOW AS $1,495

Call for:

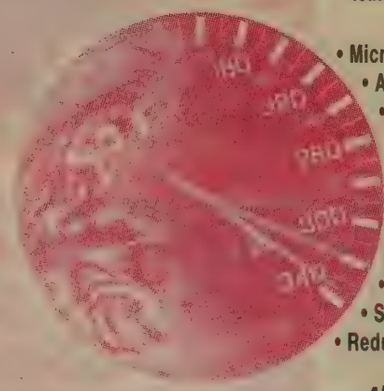
- **Web Site Design**
  Including – Setup, Domain, 15 pages, 12 Graphics, Links and Order Form
- **Reasonable Web Site Maintenance**

DESKTOP INNOVATIONS
Internal Marketing and Electronic Commerce
408/269-4929
http://www.desktopinnovations.com

Web Hosting NT Speed

Plans start from **$14.95/month***

Test after test, Windows NT has been proven to surpass other platforms in performance. Now, you can enjoy unrivaled NT speed with unmatched customer service in addition to features like:



- Microsoft IIS 3.0
- Active Server Pages support
- Cold Fusion 3.1 support
- FrontPage 98 support
- SSL secure server access
- 'Ready-to-run' CGI scripts
- Usage statistics
- Database hosting
- RealAudio/RealVideo
- Shopping Cart
- Redundant backbone connection

*Does not include set up fee and InterNIC domain registration fees.

Also check out our excellent Referral and Reseller programs

http: //sitehosting.net
A Division of Dynatek Infoworld, Inc.
E-mail: info@sitehosting.net
Toll free: (888)463-6168

SiteHosting.net

INTERNET

Unlimited access for $12.50/month!!
Dial-in & log in as guest
415.364.6674
-DataTamers-
P.O. Box 2467
Menlo Park, CA 94026-2467
415.364.7919 (voice/fax)

Classifieds On-Line!

Visit Our Web Site:
www.microtimes.com

Expand Your Universe.

PERSONAL INTERNET SERVICES

Unlimited Internet Access (flat fee)
33.6k - $16.95 mo. • 56k - $19.95 mo.
Free technical support 7 days a week

BUSINESS INTERNET SERVICES

Web Design & Hosting
Leased Lines - Modem, ISDN,
Fractional TI, TI and up

REDSHIFT

408.655.8710 www.redshift.com

MEDIA DUPLICATION

DISKETTES & CD DUPLICATION

Disk Duplication From $0.28/pc.

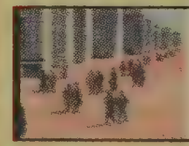
CD-R Duplication From $4.00/pc.

CUSTOM LABELS • PACKAGING
ASSEMBLY • WAREHOUSING

➨ Modem, Sound Card, VGA Card and Other Utility Disk Duplication Specialist

➨ Blank TDK, Sony, Kodak and any other CD-R74s available at wholesale prices!!

888-668-6660



Reach New Customers with
MICROTIMES CLASSIFIEDS
Call Larry Nusbaum **(510) 768-1200**

CD-R DUPLICATION SPECIALISTS

CD-R & DISKETTE DUPLICATION
CD-ROM REPLICATION
ZIP DISK DUPLICATION
PRINTING, PACKAGING
POLYBAG, SHRINKWRAP, ASSEMBLY
Same Day Turnaround Available!

(408) 943-1233

FAST RELIABLE COMPETITIVE Since 1980

International DATAWARES
2150-A Oakland Road San Jose, CA 95131
408..943.1233 tel 408..943.1002 fax

CALL US TODAY FOR A COMPETITIVE BID!

INTERNET

Web Hosting @ NT Speed. Plans start from $14.95/month http://site-hosting.net 1-888-463-6168. Dynatek Infoworld, Inc. info@sitehosting.net

Web Site Hosting from $16.95 per month (Info Treasure, Inc.)

Get Your-domain-name.com; 5 e-mail; CGI Access, 40MByte Disk Space. Toll Free 1-888-446-1688; www.link4info.com; infolink@link4info.com.

250MB Web Hosting at $14.95 per month! www.icestorm.com

We offer 250MB, 3000MB traffic, SSL access, Front Page 98 extensions, pre-configured CGI scripts, plus superior technical support at the lowest rates possible. We also offer a reseller program that can drive positive cash flow to your business. Visit http://www.icestorm.com, e-mail: webhosting@ icestorm.com, or call 415-664-4895 for more information on our incomparable webhosting deals.

ASIAN WOMEN Desire Romance, Marriage! World's #1 correspondence service since 1984! Free photo-brochure! SUNSHINE INTERNATIONAL, Box 5500-MZ, Kailua-Kona, Hawaii 96745-5500. **808-325-7707, http://sunshine-girls.com**

INVESTIGATIVE SERVICES

Townsend Investigations, Representing Silicon Valley and Northern California. CA License #PI19192, Specializing in issues of Workplace Violence, Background Checks, Domestic Concerns, Child Care provider concerns, Business Losses, Sexual Harassment, Experts in Drug Identification, law Enforcement Trained Investigators. Toll free 1-800-800-4650. URL: http://www.TownsendInvestigations.com

MEDIA SUPPLIES

Media & Supplies

We carry all kinds of Software media (diskettes, CD-R) and supplies (CD-sleeves, CD jewel cases, mailers). Lowest prices in town. **Saicom, Inc. 510-438-4550 http://www.saicomm.com**

MEDIA DUPLICATION

CD-R'S DIRECT Media, Silk Screen, Duplication San Jose location 408-383-9470 ext. 160

OVERNIGHT CD-R COPIES! 800-234-DISC Acutrack

REPAIRS

COMPUTER REPAIR

PC Install, Repair & Upgrade Hardware & Software. Flat rate plus parts. Call anytime. 510-813-8140

Monitor Express - the Bay Area's Largest Monitor Specialist. SF: 415-668-7900, Sunnyvale: 408-773-9800, San Jose: 408-436-8189. Sales and Repairs.

PRINTER REPAIR: HP, APPLE, CANON, BROTHER. We can repair them fast. Prices are always very reasonable. Visit us at 510 Lawrence Expwy., Sunnyvale, CA. (near Fwy. 101) 1-800-894-8974 (Techs wanted)

The notebook computer services center. Sale, buy, trade & repair. 408-294-9970.

MEDIA DUPLICATION

SOFTWARE DUPLICATION
- CD-ROM Replication
- CD-R Duplication
- Diskette Duplication
- Assembly, Printing and Packaging
- Same-Day Service Available
- Low Price and Satisfaction Guaranteed

888-283-0080
AV3
Tel: 510-445-0101
Fax: 510-657-8211
Web: www.av3.com
E-Mail: sales@av3.com

Don't Delay, Do it Today!!!
DISK & CD-R DUPLICATION
"Fastest in the West"
All Formats. No Minimums!!
Over 12th Year!
CD-ROM 1-1,000,000
Custom Packaging
I.D. DISK CO. (415) 883-4628 Nationwide 800-987-7509
Visit Our Web Site: iddisk.com

MICROTIMES CLASSIFIEDS

CD-R $5/Disc includes media, duplication, printing & jewel case.
$0.99/Disc includes media, jewel case
Saicom Inc. 510-438-4550

Overnight CD-R Copies
Includes Free CD Printing
Lowest Prices
AV3 1-888-283-0080

DISKETTE DUPLICATION
DUPLICATION DISTRIBUTION
1 800 798 DISK
Printing + Packaging + Shrink Wrapping
3.5 DS/HD Duplication w/Custom Labels - 100% Guaranteed
JAC INDUSTRIAL, INC.
4564 Enterprise St. • Fremont, CA 94538
Tel: 510 438-6668 • Fax: 510 438-6669

CD-R'S DIRECT
Optical Disk Replication
www.cdmakers.com
2048 Corporate Court
San Jose, California 95131
Tel: 408.383.9470 ext:160
Fax: 408.383.9487
THE ONLY CD MANUFACTURER IN SAN JOSE
ULTRA AUDIO

Overnight CD-R Copies!
888 234.DISC 3472
www.acutrack.com
- Up To 500 Copies Overnight
- Free Printing on Disc
- Reliable Duplication & Replication
- Pre-Mastering & Conversion
- CD-R Silk Screening
- CD Replication and Packaging
- Graphic Design, Film & Printing Service

Your Media Duplication And Conversion Source
- Floppy Diskette Duplication
- Tape Duplication: 9 Track, 3480, 4mm, 8mm, 1/4", Zip, Jaz, MagnoOptic & more
- Tape Conversion Services
- Label Printing & Application
- Assembly & Fulfillment

Local: 510-581-4536 • Fax: 510-581-7386
Acutrack

Your Documents on CD
MANUALS
DATA SHEETS
METHOD SHEETS
PRESENTATIONS
FONTS, LOGOS & IMAGES
SALES INFORMATION
SCAN IN HARDCOPY
DATA BOOKS
PRODUCT SPECS
WEB SITES
MOVIES, VOICE & SOUND
TECHNICAL DOCUMENTS
CALL FOR QUOTE
Content Development, Design, Pre-Mastering, & Duplication
12967 Saratoga Ave., Saratoga, CA 95070
Fax: 408.253.5446
Tel: 408.253.0466
METRO CD
A DIVISION OF METRO DESIGN CENTER

Software Manufacturing
- Diskette Duplication
- CD-R, CD-ROM Duplication
- Assembly, Printing, Shrink-Wrapping
- Inventory Warehousing & Order Fulfillment
- Complete Turnkey

SAICOM INC.
1340 Fulton Place, Fremont, CA 94539
Phone 510/438-4550 Fax 510/770-8658
Web: http://www.saicomm.com • E-mail: sales@saicomm.com

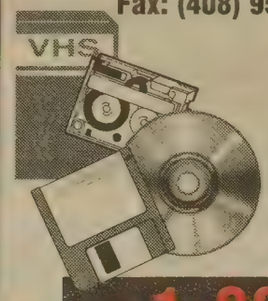
CLASSIFIED ADVERTISING SECTION

MEDIA DUPLICATION

SOFTWARE DUPLICATION SERVICES

Complete Software Packaging

2471 Autumnville Dr. Ste C • San Jose, CA 95131
Fax: (408) 956-0429 • www.softdupe.com



- Labels
- Order Fulfillment
- EDI
- CD-ROM Replication
- Printing

1-888-956-9650

Turnkey Software Duplication & Packaging

Highest Quality Media & Equipment

- Software Mastering & Replication
- Printing: Custom Color Boxes, Product Packages, Labels, Manuals & Data Sheets
- Computer Components Testing, Product Assembly, Shrink Wrapping & Inventory Warehousing
- Prepress; Graphic & Package Design

Duplication 100% Guaranteed !
Fastest Turnaround & Best Pricing

E-mail: apcsale@aol.com
http://www.apcasm.com

TO ORDER, CALL **800-666-1007**

APC, Inc. 29620 Union City Blvd., Union City, CA 94587 Tel: 510-489-8677 Fax: 510-489-8678

LOW PRICES AHEAD!

CD/CD-ROM Manufacturing (2 color)	2 Week Turnaround
1000 - 3999	$0.72
2000 - 7499	$0.68
7500 - 14999	$0.66
15000 - over	$0.64

RUSH ORDERS AVAILABLE!

CD REPLICATION • GRAPHICS • PRINTING • PRODUCTION

Crystal Sand Multimedia Services

(415)864-7771v (415)864-7778f www.crystal-sand.com

CD-R Media Duplication

SAME DAY RUSH ORDERS
NO MINIMUMS
ALL QUANTITIES ACCEPTED

CD-R &CD-ROM
- MASTERING
- PREMASTERING
- ALL FORMATS
- SILKSRCEENING
- PACKAGING & ASSEMBLY
- SHORT RUN CD REPLICATION
- CD MASS PRODUCTION
- ARTWORK, FILM, & PRINTING SERVICES
- QUICK TURNAROUND TIME

300 500 1000
Exhausted from the price confusion over these quantities? One simple phone call can solve all your problems, such as turnaround time, O.C. procedures, and pricing. We're here to serve you! The bottom line is we want your business!!!

DISKETTES
- 3.5" HIGH / LOW
- VIRUS SCAN
- LABEL DESIGN & PRINTING
- ALL PACKAGINGS
- QUICK TURNAROUND TIME

2225 MARTIN AVENUE, SUITE I / SANTA CLARA / CA / 95050
PH#(408)653-1200 Toll Free 1-800-653-1040 FAX#(408)653-1234 www.DISCPAK.com
D•I•S•C•P•A•K

MEDIA SUPPLIES

CDR MEDIA **SPECIAL** 69¢

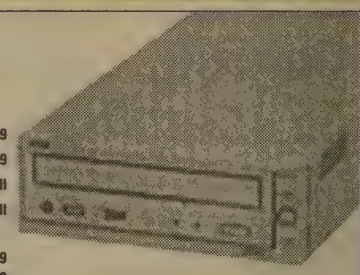
RE-WRITABLE CDs: $12.99ea.

TDK

CD-R MEDIA 74 min./650MB
Branded w/Jewel PRICE / QUANTITY

	10	50	100	500
TDK/MITSUI	$1.49 SPECIAL! - While Supplies Last			
SONY	2.29	2.19	2.09	1.99
KODAK	2.19	2.09	1.99	1.89
BLANK		1.09	.99	.89
SPINDLE			.75	.69

ORIGINAL **YAMAHA** RETAIL PACKAGING



- CRW40001PC 4x2x6 internal, rewritable, IDE $539
- CRW4260tiPC 4x2x6 internal, rewritable, SCSI $539
- CDR400tx-PM 4x6 external, PC/Mac, SCSI ..... Call
- CDR400ti-PC 4x6 internal, PC, SCSI ..... Call

HEWLETT PACKARD
- Surestore CD-writer+HP7200i (2x6) $419
- Surestore CD-writer+ HP7200e (2x6) $509

CALL FOR NEW MODELS & PRICES

CD-R PRINTERS & DUPLICATORS
- RIMAGE ..... CALL
- FARGO ..... CALL
- MediaFORM ..... CALL
- CYGNET ..... CALL
- JVC ..... CALL

CD-R ACCESSORIES
- CDR "Stick-It Right" Labeling Kit 27.99
- CDR "Stick-It Right" Refills 20.99
- CDR Paper Sleeves ..... .06
- Bulk Jewel Cases (100 minimum) ..... .20

DVD DRIVES
Panasonic • Pioneer
Hitachi • Toshiba
Call for pricing & availability

REMOVABLE STORAGE

IOMEGA ZIP DRIVES
- Zip Plus external / parallel 199.00
- Internal / external / parallel 139.00
- ZIP CARTRIDGES: $10.69/10-PAK: $99.00

IOMEGA JAZ & DITTO DRIVES
- Jaz 2 GB int. $499.00
- Jaz 2 GB ext. 599.00
- Jaz 1 GB int/ext. 289.00/379.00
- Ditto 2 GB int./ext. 117.99/167.99
- Ditto Max 2 GB int./ext. 197.99
- Ditto Pro 2 GB int./ext. 297.99
- 1GB JAZ CARTRIDGES 79.99/5-PAK $390
- 2GB JAZ CARTRIDGES 127.00/5-PAK $605

SYQUEST SYJET DRIVES
- SyJet 1.5GB Cartridge $69.99
- SyJet 1.5 GB int./ext. SCSI $279/299
- SyJet 1.5 GB external parallel (PC/Mac). $299

SYQUEST SPARQ DRIVES
- SPARQ 1.0 GB ext./int. parallel $197.99
- SPARQ CARTRIDGES: $38.99/3-PAK $97.99

SYQUEST CARTRIDGES
- 44/88 MB 34.99/39.99
- 135 MB EZ/230 MB EZ Flyer 14.99/19.99
- 200/270 MB 49.99/39.99

DATA CARTRIDGES–1/4 inch

	SONY	3M
DC2120 QIC 80	10.99/10.99	
DC2120 XIMAT	11.49/11.49	
DC2120XL XIMAT	14.29/13.29	
MC3000XL TAUMAT	26.99/ –	
MC3000XL PIMAT	24.99/ –	

TRAVAN TECHNOLOGY

	SONY	3M
TR1 (400 MB)	19.99/21.99	
TR1 (800 MB)	—/25.99	
TR3 (1.6 GB)	23.99/25.99	
TR4 (4.0 GB)	25.99/29.99	

4MM DATA GRADE

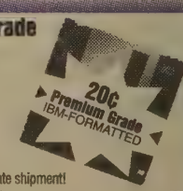
	3M	SONY
120M (4.0 GB) DDS-2	11.99/11.99	
90M (2.0 GB)	5.99/5.99	
60M (1.3 GB)	3.99/5.99	
125M DDS-3	—/34.99	

8MM DATA GRADE

	3M	SONY
QG 112M (5.0 GB)	6.99/6.99	
QG 160M (14.0 GB)	12.99/12.99	
QG AIT SDX-T3N	—/79.99	

SONY QIC WIDE TAPES
- QW5122F (420 MB) 9.99
- QW2GB (2.0 GB) 19.99
- QW3000XL (1.0 GB) 18.99
- QW3010XLF (900 MB) 16.99
- QW3020XLF (1.7 GB) 17.99
- QW3080XLF (4.0 GB) 21.99

Premium Grade IBM Formatted DISKS



Available for immediate shipment!
- 3.5HD IBM Formatted ..... 20¢
- 3.5HD MAC Formatted ..... 25¢
- OEM Duplicator Grade 3.5 HD ..... 22¢

PLEASE CALL FOR OTHER COLORS

Don't see an item you need? Call us & ask to receive our free catalog.
1-800-557-1000
We offer a full line of HP/EPSON printer supplies. Call for details.

EXXUS/DisksDirect

DisksDirect.Com

FREE SHIPPING FOR ALL ORDERS WITHIN THE SAN FRANCISCO BAY AREA

www.disksdirect.com

1-800-557-1000

MEDIA SUPPLIES

CD Recordable Products

YAMAHA
CRW4260 int. rewrite 4x/2x/6x $469
CRW4260 ext. rewrite 4x/2x/6x..... $529
CRW4001 int. rewrite 4x/2x/6x..... $429
CD400Ti int. recorder 4x/6x..... $419

RICOH
MP6200s rewritable 2x/2x/6x $369

BTC/PHILIPS
BCE621E IDE rewritable
2x/2x/6x retail kit!..... $325

SOFTWARE
Ez cd creator 3.01 + direct cd 2.0 ..... $49
Ez cd creator deluxe..... $89
Gear 4.2 professional mastering sw.... $39
Gear Replicator 1.2 bit copier $39
Gear CD-R suite $89
Gear WebGrabber $19
Adaptec Toast for Mac $49

INITIO SCSI CARD
Initio PCI ultra SCSI 2 card w/ Box, manual, drivers, warranty $69

CD LABELING SYSTEM
Stomper! Pro labeling kit w/50 labels, software & Stomper $27
Refill Kit 100 Labels $20

CD ACCESSORIES
Slimline 4 cd soft plastic jewel case
The size of one slim jewel case!! $2
Leatherette CD Wallets
12, 24, or 48 discs $8/11/14

MemoryMedia.com
888-JBC-DRAM (order only)

3390 De La Cruz, Unit 5
Santa Clara, CA 95054
408-496-8860
415-285-7007
Fax 408-496-1899

Prices subject to change and reflect a 2% Cash/Check/ATM discount
7 day money back with 10% restocking fee
See store or inquire for details

CD-R Media

	10	50	100
GOLD MEDIA			
Mitsui	1.99	1.79	1.59
Taxo/Kodak	1.69	1.59	1.49
Arita Discount	1.49	1.29	1.19
GREEN MEDIA	10	50	100
Mc Data	1.39	1.19	1.09
Arita Sliver	1.29	1.09	1.00
Spindle		.89	.79

CD-RW Discs $13.99ea. or 10 for $12ea.

PRINTER AND COMPUTER SUPPLIES

REFURBISHED HP PRINTERS AVAILABLE!

800-585-9121

MANY MODELS TO CHOOSE FROM
2's, 3's, 4's, 4V, 5's, 5SI

Call for *FAST* On-Site Service!

ABS is the Refurbished Laser Printer Warehouse!

HEWLETT PACKARD

Toner cartridges for all laser printers, fax and copy machines, recycled and brand names

Cash Paid for Your Old Laser Jet Printer

On-site LASER PRINTER TUNE-UP $39.95 (Carry-in) Exp 12/98

ABS Computers

131 8th St. • San Francisco • 800-585-9121

COMPUTER MEDIA DIRECT

Your Single Source for Computer Supplies

HEWLETT PACKARD brother Canon XEROX Authorized Dealer OKIDATA Panasonic SHARP

COMPATIBLE TONER CARTRIDGES

For HP LaserJet II/IID/III/IIID. Apple LaserWriter II/IINTX. Canon EP-S Series II/SX

PART NO	MODEL	QUANTITY 1+	QUANTITY 2+
116811	HP LaserJet II/IID/III/IIID. Apple LaserWriter II/IINTX/IIG	$34.95	$32.95
116821	HP LaserJet 4/4M/4M+/5/5+. Apple LaserWriter Pro 16/600PS	$64.95	$62.95
116842	HP LaserJet IIP/IIP+/IIIP, Apple Personal LaserWriter LS	$42.95	$39.95
116812	HP LaserJet 4L/4ML/4P/4MP. Apple Personal LaserWriter 300	$48.95	$46.95
116817	HP LaserJet 5SI/5SI MX	$139.95	$137.95
116815	HP LaserJet 5P	$54.95	$52.95
116816	HP LaserJet 5L	$49.95	$47.95
130166	Canon Copier PC-6RE, 7, 8, 11, 65, (A-30 cartridge)	$59.95	$57.95
130601	Canon FAX L700 (FX-1 cartridge)	$54.95	$52.95
116805	Canon E-31, Hi Yield (3000 pgs.), PC 310/330/770	$89.95	$87.95
116841	Apple LaserWriter Select 360	$54.95	$52.95
116823	IBM, Lexmark 4019 Hi Yield	$89.95	$87.95
116830	IBM, Lexmark 4049 Hi Yield	$124.95	$122.95
130303	Xerox 5009/5310	$74.95	$72.95
130603	Ricoh FAX 3000L/3200L, (Type 30 Cartridge)	$49.95	$47.95
130608	Ricoh FAX 2700/3700/4700, (Type 150 Cartridge)	$89.95	$87.95

	COMPATIBLE TONER	1-4	5+
116827	OKI 400/800 Series, DOC-IT, 3000/4000 Series	$17.50	$16.60
116828	OKI 400e/600e/800e Series	$16.75	$15.90
116845	Panasonic 4410/4430/Panafax UF-766/4440	$26.95	$25.60
117905	Panasonic 4450/4450i/4451/UF-750 D/FX, OMNIFAX L-75, FUJITSU DEX 730	$26.95	$25.60
116847	Sharp JX9500	$26.95	$25.60
116856	Brother HL 630/641/645/650/655M	$22.50	$21.40

If your cartridge model is not listed please call Computer Media Direct

Quality & Savings!

Realize substantial savings when purchasing quality replacement cartridges from Computer Media Direct. Your image is important, that's why all of our cartridges are manufactured by a trusted name in the Silicon Valley under strict quality controls. Each cartridge is guaranteed or we will replace it at no charge!

COMPUTER MEDIA DIRECT
2190 Paragon Drive
San Jose, CA 95131
1(800)523-1238
Fax: (408)441-8354

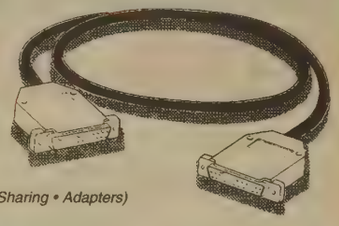
PRINTER AND COMPUTER SUPPLIES

COMPUTER CABLES

870 Market St., Ste. 305
San Francisco, CA 94102

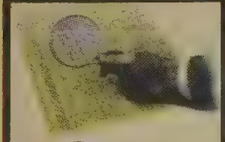
The Computer Cable Specialists

- COMPLETE LINE OF STANDARD CABLES
- CUSTOM COMPUTER CABLES
- OEM PROTOTYPES
- NETWORK • DATA COMM • P.O.S.
- RELATED ACCESSORIES (Switchboxes • Print Sharing • Adapters)



dia, inc.
computer cables
and accessories

415/392-4614
800/342-4525



Great Values & Hard-to-Find Services

MICROTIMES CLASSIFIEDS

Call Larry Nusbaum
510-768-1200

REPAIRS

Monitor and Terminal Repair. $50 most models. Warranty. 30 years experience. Call Beyond Repairs 510-783-6805.

SOFTWARE

#1 P C DIAGNOSTICS

$9.95 to $29.95 Product and download info at: **www.tufftest.com**

MacTreasures

Unique and Unusual Macintosh software. Apple II to Power Mac. **www.mactreasures.com**

AV3 - Software Duplication

We specialize in CD-ROM Replication, CD-R and diskette duplication and related services. Bring us your job and we will delight you with our high quality, low price and quick turnaround to meet your needs. Call toll free: **1-888-283-0080.**

REPAIRS

MONITOR EXPRESS

—THE BAY AREA'S LARGEST MONITOR SPECIALIST

NEW MONITORS

Special
14" imagic .28 dpi 1024x768 ..... $129.00
15" imagic .28 dpi 1280x1024 ..... $169.00
15" KOMODO .28 dpi 1280x1024 ..... $169.00
15" KLEER .28 dpi 1280x1024 ..... $165.00
17" smile .28 dpi 1280x1024 ..... $319.00
17" wyse .28 dpi 1280x1024 ..... $359.00
17" imagic .28 dpi 1280x1024 ..... $299.00

Impression
P215/PROT/7 PLUS ..... $1199/$569/$379

Mag
DX15T/DX700T/DJ702E/DJ700/DJ800 ..... $329/$579/$519/$549/$699

Princeton
EO70/EO72/EO74/Ultra 72/EO90 ..... $459/$519/$589/$429/$699

Mitsubishi
TFW8705SKHK 17" Dia. Pro. $699
TFW9105SKTK 21" $1399

NEC
A700/P750/E700 ..... $599/$849/$659

Nokia
447L058/447XAV/447XI ..... $619/$729/$669

Iiyama
MT-9017E/S901GT/MT-9021E ..... $569/$839/$1309

Sony
100ES/100GS/200ES/200GS/200PS/400PS ..... $349/$389/$599/$699/$799/$1199

ViewSonic
17PS/17EA/17GA/GT770/GT775/PT775 ..... $649/$549/$609/$619/$629/$679
ViewSonic UPA 138LCD Panels $2499

Notebook Best Buy *$1499.00*
3300 12.1" TFT/Pentium 200MMX CPU
32MB RAM on Board/3.0GB Hard Drive
20x CD Rom 1.44MB Floppy Disk
Pentium 233MHz w/MMX *$1549.00*

REFURBISHED & USED MONITORS

20" Multisync ..... from $399
17" Multisync ..... from $199
15" Multisync ..... from $129
14" SVGA NI ..... from $89
14" SVGA IN ..... from $79
14" VGA ..... from $59
14" EGA ..... from $49
14" Mono ..... from $29
Big Screen Sun, Radius, SGI & Mac Fixed-Frequency Monitors ..... from $200
Dumb Terminal & Keyboard ..... CALL
NEC, Sony, Mitsubishi, MAC, PC, Sun & Customer's Video Cable and Power Cable ... CALL

Trade your used monitors with new purchase

✦Professional PC, MAC, Sun, SGI, DEC, HP & Radius Monitor Repair

Touch Screen Installation

✦Free Estimation, Flat Rate, Free Parts (except FBT, CRT, & Case)

EXPRESS SERVICE & FREE LOANER
FREE LOCAL PICK UP

Call for Quantity, Manufacturer & Dealer Discount Price.

VISA MasterCard BBB

MAG INNOVISION NOKIA SONY ViewSonic NANAO NEC

3312 Geary Blvd. • San Francisco, CA 94118 • Ph(415) 668-7900 • Fax(415) 221-8220
538 Lawrence Expressway • Sunnyvale, CA 94086 • Ph(408) 737-8080 • Fax(408) 773-9800
689 East Brokaw Road • San Jose, CA 95112 • Ph(408) 436-8768 • Fax(408) 436-8189
http://www.monitorexpress.com

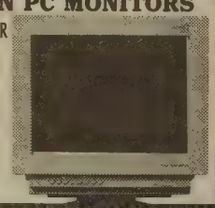
MONITOR REPAIR

EXPERT SERVICE ON PC MONITORS

INDIVIDUAL • DEALER • MANUFACTURER

- FREE Estimate
- LOWEST Price
- FAST Turnaround

FREE Pick-up & Delivery For Dealers



INDOVISION CORP.
40485 Encyclopedia Circle, Fremont, CA 94538 • 510-651-6888

MONITOR REPAIR

We Buy and Sell Monitors
Expert Repair - Staff Engineer

FREE PICK UP and DELIVERY

1 Monitor.....$45
5 Monitors .....$40 ea.

6-Month Warranty

Also Repair TV, VCR, Stereo, etc.

QUENTRONICS
Tel: (510) 790-2502
Fax: (510) 793-9142
36161 Elba Place • Fremont, CA 94536

MONITOR REPAIR

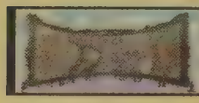
- Free Estimates
- Fast Service
- Expert Repair on All Monitors

Flat Rate up to 14" **$45**

- PC
- APPLE
- SUN Workstations

Guaranteed Lowest Price

PRO VIDEO SERVICE
1916 Camden Ave., San Jose, CA 95124
Tel (408) 371-2360



MENTION MICROTIMES CLASSIFIEDS

ONE STOP ! Monitor Repair Center

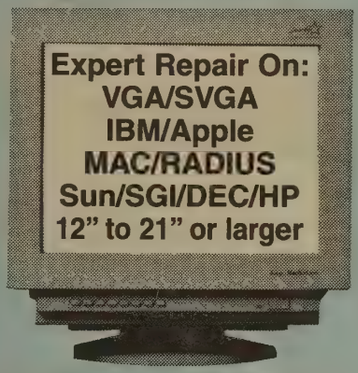
Established Since 1987

Call for Monthly & Dealer Discount Rates

New and Refurbished Monitors for Sale

$45 Flat Rate Charge

FAST TURNAROUND !



- Service Contracts
- Quality Control & IQC
- RMA & RTI Screening
- ECO Reworks

M-F: 8:30am-6pm
Sat.: 11am to 4pm

On All PC VGA,SVGA Monitors up to 14"
All Parts Included Except FBT, CRT & Plastics

6-Month Warranty
With Customer Satisfaction Guaranteed

COMPU MONITEK SERVICES, Inc.

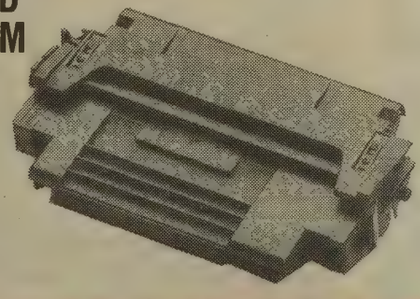
21053 Alexander Ct. #C, Hayward, CA 94545
TEL: (510) 264-1683 VISA MasterCard AMERICAN EXPRESS

LASER PRINTER & FAX REPAIR

REMANUFACTURED TONER CARTRIDGES FOR SALE

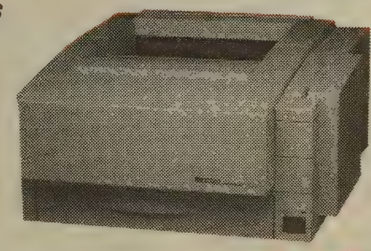
- Free Cleaning, with Repair
- Free Local Pick Up and Delivery
- Free Loaner (Laser Printer)
- On-Site and Deport Repair
- 180 Days Warranty
- **NEW & REMANUFACTURED TONER CARTRIDGES – OEM DRUM – SUPER DRUM – 100% GUARANTEED**
- Other Repair Services: IBM Compatible – Fax Machines – Monitors

$39.95 HP2 Toner Cartridge



Certified Factory-Trained Technicians

We Fix:
•HP
•APPLE
•CANON
•IBM
•PANASONIC
•SHARP
•EPSON
•OKIDATA
•NEC
•TI
•QUME
•FUJITSU
•QMS
•RICOH
•CITIZEN
•BROTHER



Laser Printer Tune-up $45

MAXIMUM 2-HOUR LABOR CHARGE FOR THE MOST DIFFICULT PROBLEMS

Fast Turnaround (24-48 Hours)

Super Rush Service Also Available

LT LASER TECHNOLOGY

FREE ESTIMATES • FAX 408-241-7698

VISA **800-201-5107 • 408-241-7699** MasterCard

1765 Scott Blvd., Ste 117 (b/t El Camino & Warburton) • Santa Clara, CA 95050

CLASSIFIED ADVERTISING SECTION

ONE STOP FOR ALL YOUR PRINTER NEEDS

Experience The Highest Quality Of Service And Value From One Of The Fastest Growing Printer Service Centers In The Bay Area

REPAIRS

- Laser, DeskJet, Fax
- 6 Month Warranty
- Free Estimate
- Service Contracts
- Flat Fee Labor
- Free Loaners

HEWLETT PACKARD Authorized Dealer Sales & Service Center

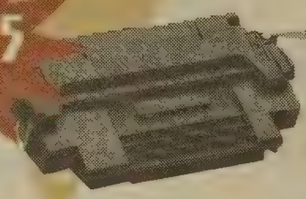
SUPPLIES

TONER CARTRIDGES

LJ II/III/IID/IIID	LJ IIP/IIP PLUS/IIIP
LJ 3SI/4SI/4SI MX	LJ 4/4PLUS/4M PLUS
LJ 4L/4ML	LJ 5/5N/5M
LW PRO 800/810	4019/4019 E
LJ 5LLJ 5P/5MP	

CALL FOR YOUR PRINTER

$29.95 HP4



15% OFF

LASER PRINTER REPAIR WITH THIS AD

WE'LL BEAT ANY COMPETITOR'S PRICE

Prices are subject to change without notice. While supplies last.

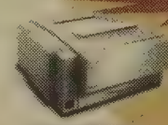
Apple brother COMPAQ NEC Panasonic HEWLETT PACKARD LEXMARK OKIDATA Canon VISA

*Note: All registered trademarks and logos are the properties of their respective companies.

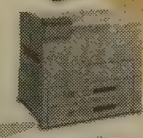
SALES

BRAND NEW PRINTERS

REPAIRS & PRODUCTS 100% GUARANTEED



LaserJet 6Pxi. $718.95
Laser Jet 6MP $859.95



5si $2289.95
5siMx. $3279.95

LaserJet 4000 . . . . $1079.95
LaserJet 4000T $1239.95

LaserJet 4000N $1379.95
LaserJet 4000TN. . . $1539.95

COMPUTER XTRAS XPRESS INC.

F.K.A. Signature Toner Express Division

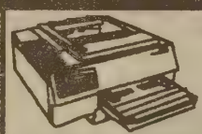
San Jose
1671 Regius Ave.
408-452-4080

1-888-774-LASER(voice) 1-888-554-LASER(fax)

San Francisco
452 Ave., suite 354
415-788-5700
office by appointment only

LASER PRINTER REPAIR

Business Laser Printers • Personal & Business Inkjet Printers



- AUTHORIZED HP REPAIR CENTER
- 6-MONTH WARRANTY
- FREE: Local P & D, LOANER, & FLAT -RATE Estimates!
- We will beat any competitor's repair estimate!

*Applies to Most HP Laser Printers

LJ II/III Toner $32.95
LJ 4/4+/5 Toner $62.95 w/tune-up
New LJ 5SI/ 5SI MX Toner $139.95
New LJ 3SI/4SI Toner $99.95

Mention this ad . . . We sell new and used printers!

SAME- TO NEXT-DAY DELIVERY
NEW & RECY. SUPPLIES
HIGH QUALITY & LOW PRICES

Color Laser Printers • Large Format Laser Printers

LaserSharp Inc.

Sales & Service: (408) 730-0400
510 Lawrence Expwy. #107, Sunnyvale • Open M-F 9:00-6:00

All major cards accepted

Apple, Brother, Canon, DEC, GCC, LexMark, QMS, Xante

MONITOR & TERMINAL REPAIR

- 10 years of expert service on any model & size
- TERMINAL, VGA, SVGA, SUN, MAC, & MULTISYNC
- 2-day quick turnaround & 120-day warranty
- Lowest price, free estimate, pickup & delivery
- Free parts, excluding CRT, FBT, & BEZEL

CSV 2071 Winchester Blvd., Campbell, CA 95008
Tel: (408) 374-0659 Fax: (408) 374-0289

Great Values & Hard-to-Find Services
Call Larry Nusbaum: **510-768-1200**
MICROTIMES CLASSIFIEDS

MONITOR REPAIR CENTER

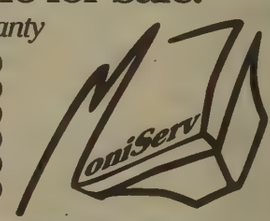
10% OFF
ViewSonic
Sony • Mag
Offer Expires 6/30/98
Must bring in coupon to receive discount

We Specialize in:
Monitors for PC & Mac

$50 Flat Rate *Up to 14" PC Monitor Ex. FBT. CRT*

Brand New Monitors for Sale:
Three Year Warranty

17" .28mm AG Shadow Mask, G380 . . . . . $269
17" .25mm AG Shadow Mask, G387 . . . . . $339
17" .25mm AG Apacture Grilled, GA 387 . . $389
17" .25mm AG Professional, PA380 . . . . . $439
19" .26mm AG Shadow Mask, G400 . . . . . $499
21" .28mm AG Professional, PA630 . . . . . $799



Please check out our Web site for ***Refurbished Monitors***

www.moniserv.com

MoniServ Inc.

1-888-785-7288 or (510) 785-7288

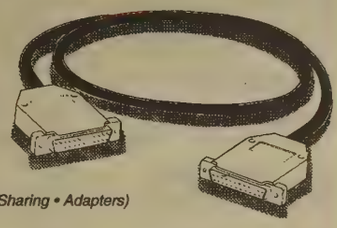
2223-2227 Commerce Place
Hayward, CA 94545
Business Hours: 8:30am-5:30pm M-F; 10:00am-3:00pm Sat.

COMPUTER CABLES

870 Market St., Ste. 305
San Francisco, CA 94102

The Computer Cable Specialists

- COMPLETE LINE OF STANDARD CABLES
- CUSTOM COMPUTER CABLES
- OEM PROTOTYPES
- NETWORK • DATA COMM • P.O.S.
- RELATED ACCESSORIES (Switchboxes • Print Sharing • Adapters)



dia, inc.
computer cables
and accessories

415/392-4614
800/342-4525

THE NOTEBOOK COMPUTER SERVICES CENTER

SALE, BUY, TRADE & REPAIR

FREE ESTIMATES

We Buy, Sell, Trade, Repair & Refurbish
Laptops, Notebooks & Subnotes.

We Specialize in Component Analysis
Upgrades, Hard Drives & Memory.

90-DAY WARRANTY

We Perform:

- Network Consulting Services
- Programming Analysis
- Quick Turnaround
- Special Rates for Business-to-Business Accounts
- Repair & Troubleshooting
- Hardware/Software Assessment
- Free Pickup and Delivery

1-on-1 Training/Instruction for Computer Novices.
We Specialize in Windows NT.

Bring this ad in as your coupon and receive 10%OFF any repair or purchase

LapTopTek
AN LTT CORPORATION COMPANY

Tel (408) 294.9970 or 1-888-886.6800
2030 Senter Rd., San Jose, CA 95112 • Fax (408) 294.7088

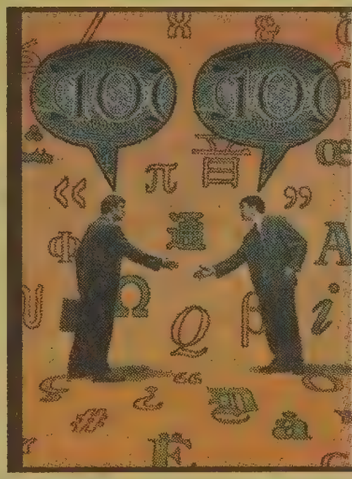
COMPAQ IBM AST COMPUTER Apple TEXAS INSTRUMENTS Acer EPSON Canon ZEOS Packard Bell TOSHIBA

Does Your Company Have Technical Job Openings?

Target Qualified Professionals with

MICROTIMES CLASSIFIEDS

For info call Larry Nusbaum
Classifieds Account Executive
(510) 768-1200 • E-mail: larry.nusbaum@microtimes.com



"The response from our *MicroTimes* Printer Repair ad has worked so well that we have had to build up our technical staff just to keep up with the increased laser-printer repair work. Thank you!"

Saul Hernandez
General Manager
LaserSharp Inc.

MICROTIMES CLASSIFIEDS

CONSULTANTS' NETWORK

CDR Specialists

For all your CD-R replication, media, silk screening, and packaging needs, call the specialists. Unbeatable price, quality, and Service. **Saicom, Inc. 510-438-4550(T) 510-770-8658(F) http://www.saicomm.com**

Network Consultants

Expert, reliable network design, consulting and support. We provide affordable services in multiple OS integration (NT, Novell, Win, UNIX and Linux), Internet connectivity (www, FTP, mail, firewalls), and UNIX and Linux technologies. 510-835-7873 or info@suse.com

MONITOR REPAIR

FREE ESTIMATES • ALL MAKES & MODELS

12"-15" . . . . . $39 + parts
16"-18" . . . . . $68 + parts
19"-21" . . . . . $95 + parts

(415) 292-5623

1450A Bush St. San Francisco • www.boma-electronic.com
Monday-Saturday 9:30-6
BOMA ELECTRONICS SVC

Everything for and about the PC: http://www.pc-consultant.com 650-755-2284

FAST

Affordable PC & Lan Help! Setup-Upgrade-Troubleshoot. Windows 95, NT & WFW, Novell, Lantastic. Hardware Sales. Software Installation & Training. Very competitive rates. Call John Herring **510-527-3711.**

CONSULTANTS' NETWORK

Systems & Network Integration

Call John Romig at **408-866-8033** x114 to schedule a **FREE** consultation of your desktop system & integration. Founded in 1985, we are in the business of providing hardware and software solutions.

- Microsoft Win NT
- Network Design
- Exchange Server
- Project Mgmt.
- Novell

DeVries Data Systems, Inc.
Productivity Through Technology
www.dvdata.com

Microsoft Certified Solution Provider

3Com networking Partners program

DEVICE DRIVER FOR WIN 95/NT
NDIS and PCMCIA
TCP/IP Protocol
PCI/ISA/VCOMM
510-651-1889

BEN GORDON PC CONSULTANT

WINDOWS NT	NETWORKS
WINDOWS 95	INTERNET
WINDOWS 3.1	HARDWARE

650.755.2284

Cooperative Digital

design, consulting, implementation, service

*WinNT *Win95 *MS BackOffice Solutions
*Telephone systems: PBX & voicemail
*LAN, WAN *Routing: Cisco, Ascend, Unix
*Microsoft Certified Systems Engineers
*Embedded & customised Linux soultions

510-644-8085
www.coopdigital.com

100% employee-owned
Excellence in action!

Internet/Network Consulting

WWW/Internet Servers, Novell, AppleShare, LAN, WAN
Unix/NFS, System Administration

Database Design

PowerBuilder, 4th Dimension, FoxPro, FileMaker Pro

Software Development

Mac & Win, C, C++, Pascal, AppleTalk, TCP/IP, MacApp, TCL

The Stradivarian Group

Professional Computing Services

(408)257-4482 info@tsgus.com

LET US WRITE YOUR DRIVER!!

Since 1987

OUK Co. Ltd. can develop device drivers for your software & hardware to fit within the Japanese computer environment.

Our Experience in Device Development Includes:

- Device drivers for input and output
- Graphics control software
- Built-in software
- Product management system software
- General applications

We can develop the device driver for your products.
Call toll free **1-877-364-8630** for more information

http://www.ouk.co.jp OUK e-mail:yamas09@ibm.net

NETWORK PRINTING

- *Networking*
- *Website Development*
- *Computer Repairs*
- *Laser Printers*

NOVELL.

IBM® Business Partner

Since 1991

hp HEWLETT PACKARD *Authorized Reseller*

American Laser Products

Toll Free: 877-Laser-R-Us

925-449-1805

AmiSys®

Specialists in Serving the Banking Industry

Experts in:
Visual Basic
Microsoft Access
Microsoft SQL Server
WEB & Client/Server Solutions

Convert your VB Applications and Reports to the WEB!

Visit our Web Page at www.amisysinc.com or call (925) 246-1530 for information

"We do the best customized computing for you."

C & B *C & B SYSTEMS*

We Service Many Corporate Clients

Providing: • Network Configuration • Troubleshooting and Service

2355 Oakland Road • Suite #8
San Jose, CA 95131

(408) 456-6902 • Fax: (408) 456-6903

Database & Software Development

IT RUNS.... OR YOU DON'T PAY

- ✔ Access 97'
- ✔ Visual Basic
- ✔ C/C++
- ✔ SQL Server
- ✔ Oracle

...and more

DISCOVERY COMPUTER NETWORKS

1849 Willow Pass Rd. #206
Concord, CA 94520
1-510-691-1198
1-888-600-1222

Over 25 Yrs Experience

Training Included

"Call For Free Consultation"

Affordable PC and Network Support

SET UP • UPGRADE • TROUBLESHOOT

Work Station, Server, Single System & Components. Complete Systems & Parts, Sales and Installation.

Your Networking Made Easier with:

Windows 95 & Workgroups, Lantastic & Novell, at Very Competitive Rates.

FAST!

Serving San Francisco and the East Bay

Call John Herring at
(510) 527-3711

Emergency voicemail pgr:
(510) 641-2608

CONSULTANTS' NETWORK

FREEMAN'S ALMOST FREE CONSULTING. Low rates for installing new systems or adding new hard or floppy drives, modems, printers, CD-ROMs. Also configure DOS or Windows 95 software for optimum performance. Can give you shareware games, menus, freeware, utilities and delightful things you didn't dream existed. Kyle Freeman 415-621-4430.

We DO EVERYTHING! Custom Relational Databases, Inventory, Document Scanning, Scheduling, Projects, Management, Bar Code; Training; Networks and Cabling. Internet Sharing Setup, WEB development; Repair, Upgrade, New Hardware; $30/hr, First hour Free! George Ou 415-382-9672 oucomputers@geocities.com.

RPS TELEDATA

The LOW PRICE Cabling Experts

Installing Tomorrow . . . Today!

Fiber-Optic Twisted Pair Coaxial

(510) 980-2714

CA Contractors License #688214

Novell Gold Authorized Reseller

- Installation
- Management
- Sales

2 CNEs ON STAFF

Abbott Computer Services
(510) 234-5618

Find the Balance You Need in the Consultants' Network!

Microsoft

SQL Server

Professional Development

- Visual Basic
- Visual FoxPro
- Visual InterDev
- MS Access
- Financial Solutions
- Multi-Tier Development
- Data Warehousing

Microsoft Certified Solution Provider

Visual AccountMate SQL

NetBase Development Group
3 Windmill Place
Novato, CA 94945

www.netbasegroup.com
415-899-9637
415-899-9647 (Fax)

since 1993

A Web Applications & Database Development Firm
JAVA, Database, Design,
Hosting & Consulting Services
415.543.0760 • www.eline.com

LAN

COMPUTER CABLING. Cat 5, 10 BASE-T, Voice, ISDN. 10 year warranty, Free estimates, Competitive pricing. Your COMMUNICATIONS SPECIALISTS. 650-219-0989.

CATEGORY 5 CABLING. Fast Reliable Service. Free Estimates. Call the Best. 24-Hour Hotline. 650-738-0264.

Network Cabling at Modest Prices

Professional Service, No-Charge- Estimates. Fax, Modem & Voice cabling. RPS Teledata **510-980-2714** License #688214

TOP NETWORK SPECIALISTS. NT, UNIX, Novell, web design & admin., internet security, remote access, local/ wide area. S.B.S., Walt: Voice 1-800-215-6333.

Microsoft Exchange, MSMail, NT Consultation, design, and implementation. Call Rob 650-359-8372, e-mail: Coast@Slip.net.

PROGRAMMING

****ACCESS, VB AND NT CONSULTING****

Databases and networks. Excellent references, helpful consultations. Programmers wanted. PavlovDog Co. 510-540-1150. E-mail: pavlovdog@earthlink.net

High quality programming, consulting. C/C++, VB, Access, Java, COBRA, NT. Six Sigma Software. Brian Strand 510-595-8675, e-mail: strand@pacbell.net

SOFTWARE DEVELOPMENT for networked PCs. Design, development, and documentation. 15 years of professional experience. Gibson Engineering 415-431-9414. bark@oddhours.com Mark Baker/Gibson Engineering 42-1/2 Langton St. San Francisco, CA 94103

Access 97 Databases

Expert, Affordable, Fast Access 97 Database Development. Solon Systems Consulting 800-286-1782 **www.solonsystems.com**

Intro Web Package - $295

The easy, affordable way to put your business on the web now! Call or visit our site for details. Solon Systems Consulting 1-800-286-1782 www.solonsystems.com.

Custom Software Development. Visual Basic, MSACCESS, SQL SERVER, C Under NT & 95. Industry Experience. References. 925-462-4901. E-mail: FM150@AOL.COM.

PROGRAMMING

Web Application Development

We are experts at converting VB, Powerbuilder, MS Access and Foxpro applications into JAVA based applications that run over the Internet.

Try out our sample web application at http://objectorientedgroup.com

(510)713-2906

Custom Database Systems

- Client/SQL Server
- FoxPro
- Microsoft Access
- Visual Basic
- Visual C++
- Internet/Web
- NT & UNIX Networking
- Accounting

ST JOHN BUSINESS SYSTEMS (510) 549-9165

SBS

PROGRAMMING

C/C++ Programming
Communications and client-server. Internet projects. Windows 95/NT LAN setup and troubleshooting. Mick 1-800-334-0042 www.lilly-pad.com

INTERNET/INTRANET DATABASE DEVELOPMENT. Database application development for the Internet and internal corporate intranets on your web server or ours. Secure data transmission (encryption) available. Clients include: HP, Wells Fargo, Varian, New York Life. Aardeus, Inc. 408-615-8423

Contract Engineering Services

'Round Noon Software

Custom Business and Financial Solutions. NT Backbone Programming, UNIX to NT Conversion, Internet Systems Development. C++, Java, Perl, HTML

Call Jim Aragon, President @ 972-789-2902 www.roundnoon.com

Windows & LANs

Custom software using Visual Basic - Access - C since 1979

SYSPRO Corp. (510) 254-9755

VISUAL SOLUTIONS

- Database Design (Access, SQL, Oracle, Sybase)
- Software Development (C/C++, VB, Cobol, xBase)
- Networking (Novell, NT, Internet)
- Turn-key Office Solutions

We figure out how to! 925-671-2451 • VS@Visualscs.com

Web-Site Design

Web-Site Development
- Low-Cost Design
- 3D Graphics, Programming

Web-Site Management
- Updates & Improvement of Site
- Site Maintenance *(Web Hosting Services Available)*

SUNNY-GRAPHICS

http://www.sunnygraphics.com
Phone: (408) 954-8777

Database Programming

- ♦ Visual **FoxPro**
- ♦ Microsoft **FoxPro** 2.x
- ♦ HTML & Perl **Web** Databases
- ♦ SourceMate & SBT **Accounting**
- ♦ NT & Novell **Network** Experts!

AccounTech

(408) 266-2660

Since 1983 • Member BBB

CAREER OPPORTUNITIES

SYSTEM SOFTWARE ASSOCIATES, INC.

SSA is where you Need to be IN SOFTWARE

Technical Experts

SSA is on a roll! Offering the fastest time to benefit, with our revolutionary BPCS Client/Server v.6 offering the most robust, powerful, and state-of-the-art Client/Server applications-on the world's leading hardware & database platforms.

Marketing to the industrial sector, our software is used in over 90 countries and in 20 languages by 8500+ clients (ranging from single sites to hundreds of locations), at 25,000 sites, and 3,000,000 end users.

Whether you're from the software industry, a consulting firm, systems integrator, or manufacturing company…here's a terrific career & income opportunity to work with the very best people, resources & technologies. See for yourself!

The BPCS Client/Server product suite delivers coampetitive advantage by integrating all mission critical operations from global financials to multi-mode manufacturing to management of the total supply chain, including Electronic Commerce and EDI. SSA's Distributed Object Computing Architecture (DOCA) provides the computing platform choice, whether IBM AS/400 or RS/6000, Digital, Hewlett-Packard, a combination of these or server access via the Internet. Database options include Oracle, Informix and DB2/400.

Based on aggressive sales & growth, we're currently interviewing for:

- **AS/400 Technical Implementation/Integration Consultants**
  Deliver technical solutions/translate client business processes/technical requirements into solutions using our CASE tools, integration technology, and technical project life-cycle methodology. BPCS, AS/SET - RPG, AS/400 - EDI and/or other ERP preferred.
- **Technical Implementation/Services Manager**
  Lead our 10 person Western Area technical consulting team, including resource development/scheduling, staff mentoring and training, client visits with Sales team for implementation planning. Key required skills: project management, client interface/relationship-building, some knowledge of AS/400 and UNIX.
- **Systems Administrator**
  Support of network infrastructure, PC's and laptops for Western Area sales and service teams. Required skills: Win 95 and networking. Preferred: NT, Lotus Notes, AS/400.
- **EC/EDI Technical Consultants**
  Use your EDI products knowledge and AS/400 systems integration skills to assist SSA clients in implementing their ERPII-based EC/EDI strategies & programs. 5+ years EDI & systems integration/developer experience, excellent communications & project management skills.

Record Breaking Sales... Major corporate clients worldwide...
Industry's fastest time-to-benefit... Unmatched global support...

Our salaries, bonuses, and commission structures can't be beat!

Note: Relocation typically not required. You can be based at your home office.

For immediate consideration, forward your resume to:
John Wagner, System Software Associates, One Market, Steuart Tower, Suite 2200, San Francisco, CA 94105, Fax: 415-537-2494. E-Mail: jwagner@ssax.com Web: http://www.ssax.com

Equal opportunity employer m/f/d/v.

PROGRAMMING

SOFTWARE DEVELOPMENT in FoxPro, Visual Basic, and Access for networked PC environments. Design, development, and documentation. 15 years of professional experience. Gibson Engineering, Mark: 415-552-6165, e-mail: bark@well.com.

Data-Based Solutions

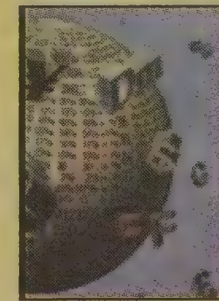
Delphi and Paradox application development and training. Saur Consulting, 510-636-9656. **asaur@compuserve.com**

Database Applications. Visual FoxPro, Interactive web programs, Clipper, Oracle Power Objects. Client Server and xBase. Custom design, modifications or conversions. Since 1985. Paltiel Inc. 650-345-0152, e-mail: barbara@paltielinc.com.

CUSTOM PROGRAMMING, 21 developers on staff, Delphi, JAVA, Visual Basic, Paradox, Access. Client/Server experts. Call Greg 408-866-8033 x100 for FREE CONSULTATION.

PROGRAMMING

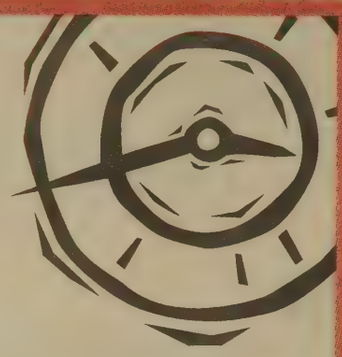
http://objectoriented-group.com Professional software development in Visual Basic, Access, Foxpro, Powerbuilder using ORACLE, MS SQL Server, SYBASE. Client list includes: PG&E, Pacific Bell, Stanford Univ. and Aon Risk Services. Visit our web site or call: **510-713-2906.**



E-MAIL your classified ad to **classifieds@microtimes.com**

CAREER OPPORTUNITIES

Time for a new job?



Hi-Tech Jobs Fast
www.siliconvalley.dice.com

Don't gamble with your job search! Point your browser to **www.siliconvalley.dice.com** for **FREE** access to thousands of contract and full-time job listings for Programmers, Analysts, Technical Writing professionals and more!

DATA PROCESSING
INDEPENDENT
CONSULTANT'S
EXCHANGE

A service of D&L Online, Inc. 515.280.1144

RWD Technologies, Inc.®

A broad-based background and a hands on approach. With these qualities, you'll stand out at RWD Technologies, a dynamically expanding high-technology company with headquarters in Colombia, Maryland, offices nationwide and an international presence. We are an organization assisting Fortune 500 companies in developing and implementing customized online performance support systems using the latest web authoring tools, internet techniques and business process analysis methods. These online systems are geared toward improving human performance in the workplace. Currently, we are seeking a variety of talented individuals with many backgrounds including:

- Engineering
- Document Management
- Consulting
- Training
- Multimedia
- Project Management
- Business Process Analysis
- HTML

Design and development of leading-edge performance-based technical training, documentation, and online performance support materials for complex systems through direct interface with our clients. Interpersonal skills and the use of personal computer expertise are required in the following areas:

- Business Process analysis and re-engineering
- Performance-based technical training
- SAP, Oracle, Baan, Peoplesoft ERP packages
- Classroom Instruction
- Change management
- Engineering

Immediate Openings Include:
Design and development of leading-edge online documentation systems and templates using Microsoft Office applications, Visual Basic, Javascript, HTML and other software tools. Experience and related degrees in the following areas are important.

- Web Publishing Document Template Automation
- Client Server Development
- Project Management
- Structured Software and Object-oriented Methodologies
- Multi-media Tools
- Technical Leadership Experiences

We offer an exciting, fast-paced environment, Travel and an outstanding benefits package (including in-house technical training and tuition reimbursement), competitive salaries, and an excellent performance and growth incentives.

Please send resume and salary requirements to:
RWD Technologies, INC.
2377 Gold Meadow Way, Suite 100
Sacramento, CA 95670

Fax Resumes to (916) 631-1948, Job Code HRE-98-033
www.rdw.com

An Equal Opportunity Employer

TRAINING

Find the Balance You Need in the Consultants' Network!

Learn what it takes to:

GET IT CERTIFIED

for more infomation call
Global Information Services 24 hrs
(925) 746-8284
(800) 848-2320

NT Novell Oracle A+ Office User

COMPUTER GRAPHICS ART INSTITUTE

www.sunnygraphics.com/cgai

S.F. / SAN JOSE

COMPUTER GRAPHICS TRAINING

Become highly in demand as a 3D Graphics Animator & Designer

- 3D Animation Courses
- SoftImage
- Alias-Power Animator
- Adobe PhotoShop

Train on the Silicon Graphics Workstations—Indy, O2
(Consignment lease on SGI Workstations available)

CGAI 1887 O'Toole Ave., #C-203 • San Jose, CA 95131 • 408-954-8777

HAVE YOU SEEN EITHER OF US?

1-800-VANISHED
for sightings

VCA *Vanished Children's Alliance*
(408) 296-1113 • Fax: (408) 296-1117

Gillian Beth Smithline

Date of Birth: 8/17/81
Missing From: Calabasas, CA
Eyes: Brown
Hair: Brown
Date Missing: 1/29/98
Missing Type: Runaway

Melissa Ann Barnum

Eyes: Green
Hair: Sandy
Missing From: San Ramon, CA
Date of Birth: 5/9/81
Missing Type: Runaway
Date Missing: 1/5/98

CAREER OPPORTUNITIES

Retail Computer/Software Company

Seeks store manager for our Fremont store. Sales and management experience required with good communication skills a plus. Flexible schedule a must. This position offers excellent salary, commission, paid vacation, paid sick leave and great employee discounts. Fax Resume to 408-743-5655

SYSTEMS ENGINEER: analyze, design, test, troubleshoot computer system. B.S. in Computer Engineering or its equiv. 2 yrs exp. in both computer hardware and software level. $4.8k/mo. 10am-6pm. job site interview in San Jose headquarters. Send resume to **For-U-Computer,** Inc.: 765 Mabury R, San Jose Ca. 95133

PC Pros INFORMATION STAFFING- Jobs Available now! *Technical: PC/Mac Specialists, Database Programmers, Network Administrators, Minicomputer Operators *Administrative: Word Processors, Data Entry *Graphics/New media: Graphic Artists, JAVA / Perl Programmers. **Call: 310-312-6600 / Fax: 310-479-8233 www.pcprosla.com**

COMPUTER USERS NEEDED- Work own hours. 20K - 70K per year. Call: 800-348-7186, Ext. 5200.

TRAINING

Computer Graphics Training

3D Animation Courses: Softimage, Alias-power animator; AdobePhotoshop. Train on the Silicon Graphics Workstations-Indy, O2. Become a highly in-demand Graphics Animator & Designer. CGAI 1887 O'Toole Av #C-203 San Jose, Ca 95131 408-954-8777 www.sunnygraphics.com/cgai

WORDPERFECT EXPERT. Training, optimization, productivity planning. Macro/template programming. Profiled in InfoWorld and WordPerfect Magazine. 415-921-6850, http://www.microCounsel.com

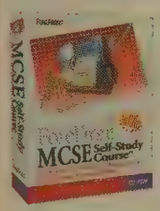
Increase your skills, marketability and income... Train to be a Microsoft Certified Systems Engineer. GET YOUR MCSE NOW! Resolution Training & Consulting of San Francisco. 415-391-3210.

Be Prepared for Any I.T. Challenge!

ForeFront offers the fastest and easiest way to fully prepare you for a successful career in the ever expanding Information Technology (IT) industry. Our Self-Study Courses are 100% computer-based training (CBT) on CD-ROM to give you flexibility unmatched by traditional training methods. Study at your own pace using our proven step-by-step format, whenever and wherever it's convenient for you!

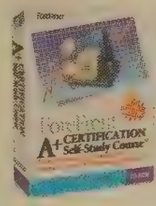
- **Gain Valuable Knowledge, Recognition and Skills**
- **Boost Your Income**
- **One-on-One Training Consulting**
- **Increase Your Job Opportunities and Advancement**
- **Self-Paced Format, Study Whenever You Want**
- **Interactive Hands-on Exercises**

Become MCSE Certified...*FAST!*



The ForeFront MCSE Self-Study Course™ ensures the highest rate of information retention so that when you complete your training you'll be fully prepared to pass your MCSE exams. You'll be ready and confident to go into the workplace to effectively plan, implement, maintain and support information systems in a wide range of computing environments using Windows NT and other Microsoft® Server products.
Call now to get more details!

Become A+ Certified...*FAST!*



Getting A+ Certified will help open the way to further advancement in the high-tech industry. **The ForeFront A+ Self-Study Course™** is a hands-on self study course that will give you all the technical material, knowledge and interactive exercises you'll need to pass your exams and excel in today's competitive PC repair marketplace.
Call now to learn more!

Become CNE Certified...*FAST!*

The ForeFront CNE Self-Study Course™ provides fast, effective and convenient training to anyone wishing to become a Certified Novell Engineer, even when hampered by a busy schedule. Our CNE CBT allows you to learn and practice *everything* you'll need for full Novell certification. **Call now for more information!**

Introduction to PC Repair Self-Study Course

Provides you with the easiest and most effective way to learn the fundamentals necessary for a profitable and successful career as a PC Repair Technician. Ideal for individuals new to the IT profession!
Call now for more information!

- **Free Technical Support**
- **Expert career consultants**
- **Next Day Shipping**
- **Performance Guaranteed**

Call for Special Discount Pricing Today!

1-800-475-5831

(800) 653-4933 • (813) 724-8994 • FAX (813) 726-6922

FORCEFRONT™

25400 U.S. Hwy. 19 N., #285
Clearwater, FL 33763

MTM

Copyright ©1998 ForeFront Direct, Inc. All Rights Reserved. ForeFront MCSE, CNE, A+ Certification and Introduction to PC Repair Self-Study Courses are trademarks of ForeFront Direct, Inc. The ForeFront Logo is a trademark of the ForeFront Group, Inc. All other trademarks are the properties of their respective holders. ForeFront Direct, Inc. is a subsidiary of ForeFront Group, Inc.

Build Your Customer Base with
MICROTIMES CLASSIFIEDS

NEED ADOBE TRAINING?

Adobe Expert Instructors!

- FrameMaker
- FrameMaker+SGML
- Acrobat
- Photoshop
- PageMill
- PageMaker

Training, Software and Consulting -San Francisco -San Jose

Adobe ADOBE AUTHORIZED LEARNING PROVIDER

www.caxton-inc.com
(415) 552-5535 Register Today!
Corporate Training Specialists

Computer Classrooms

Rental Includes:

Continental Breakfast	Full T-1
Pentium 300 Mhz	64 MB RAM
LCD Projector (550 lumens)	17" Monitors

DeVries Data Systems, Inc.
888-866-8033 www.dvdata.com alex@dvdata.com

THE ADDRESS FOR SUCCESS

http://www.aics.edu

- Earn B.S. and M.S. in Computer Science
- DISTANCE EDUCATION
- Object oriented B.S. program
- New courses in Java, Networking, HTML, MIS
- Approved by more than 275 companies
- Follows ACM/IEEE guidelines

AMERICAN INSTITUTE FOR COMPUTER SCIENCES
The leading edge of learning

STATE LICENSED AND APPROVED

FREE CATALOGUE
1-800-767-AICS** or **www.aics.edu

Earn Your Accredited B.S. Degree studying at home!

Grantham College of Engineering

Your first step to a better future!

Offers 3 Distance Education B.S. Degree Programs in:

- **Computer Science**
- **Electronics Engineering Technology**
- **Computer Engineering Technology**
- **Courses include: JAVA, C/C++, Visual Basic 5, Networks and more**

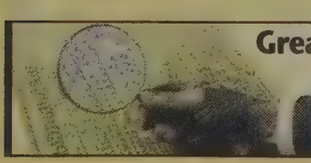
CALL NOW!

- Electronics WorkbenchProfessional 5.0 included on our B.S.E.T. curriculums
- Approved by more than 400 Companies, VA and Dantes, (tuition assistance avail.)

SINCE 1951

EXCEL TO YOUR FULL POTENTIAL
For a free program catalogue call
1-888-GCE-4242
http://www.grantham.edu

DETC



Great Values & Hard-to-Find Services
Call Larry Nusbaum: **510-768-1200**
MICROTIMES CLASSIFIEDS

Increase your skills, marketability and income...

GET YOUR MCSE NOW! Get Industry recognition, increase your earning potential, and enter a high demand job market with tremendous growth opportunity.

Train to be a Microsoft Certified Systems Engineer

Integrated MCSE preparation course includes:

- 70 hours classroom instruction (10 weeks)
- 5 textbooks (a $250 value)
- Instructor-led exercises
- Unlimited Independent lab time
- Access to practice tests
- Free use of computer based training courses
- Instructors have teaching & MCSE credentials and significant real-world teaching and consulting experience
- Evening and weekend schedules
- Downtown SF location near public transportation
- Unbeatable price and quality
- Instructor owned & operated - so you know we care

Complete package: $2995

415-391-3210
Resolution Training & Consulting, Inc.
414 Mason Street, Suite 502, San Francisco
Mon-Fri: 12-9:30pm, Sat. 9am-6:30pm, Sun: by appt

Our Focus is Your Success!

UC BERKELEY EXTENSION

- *Windows - NT Workstation + Server, 95/98*
- *Microsoft MCP/MCSE/MCSD Certification*
- *Novell CNA/CNE*
- *SCO UNIX*
- *PC Systems Specialist*
- *Ascend & Cisco Routers*

Certificate Programs

See Page #s 149, 160, 151, 153, 156 in Summer 1998 Catalog.

Classes at FREMONT & OAKLAND
(Short walk from 12th St. BART)

(510) 642-4111

Microsoft Certification

Get the **training you need** to become a **Microsoft® Certified Windows NT 4.0 Professional...**

- NT Cluster Server
- Internetworking with TCP/IP
- NT Server 4.0 Enterprise
- MS Firewall Proxy Server
- MS Exchange Server 5.5
- Microsoft Certified Trainers
- Competitive Prices
- Student Practice Labs & Exams
- Free Course Retakes
- 100% Satisfaction Guaranteed

Day & Evening MCSE Programs
San Jose & Fremont Locations

Get Started Today!
1-888-825-MCSE TOLL FREE
e-mail: training@unitek.com
http://www.unitek.com

Authorized Technical Education Center
Microsoft

Unitek
NETWORK EDUCATION
MICROSOFT AUTHORIZED NT TRAINING CENTER

CUTTING EDGE TECHNOLOGY UPDATE!!

Network Engineering & Management Courses

Are you a technician, developer, or systems administrator who needs to add to your skills to meet the growing demand for network engineers and managers? Expose yourself to the hub of computer-career refinement that meets the needs of today's industry. Computer Learning Center Inc. is the nation's oldest and largest center, leading the pack in training and enhancing computer professionals' toolkits.

EVENING COURSES NOW AVAILABLE

Reserve your seat today at any one of our many seminars with no obligation.

CLASSES STARTING SOON!!!

Client/Server Technology
Windows 95
Visual Basic
UNIX
C++
COBOL
Oracle 7
SQL & PL/SQL
Object-Oriented Programming
Software Development
MS Windows NT
TCP/IP Protocol
End-User Support
Macintosh Connectivity
Maintenance
Novell NetWare
WEB Design
Inter/Intra Network
Plus much more . . .

CLC Advantages . . .

- *Experienced, Qualified Instructors*
- *Unlimited Job Placement • Financial Aid, If Qualified*
- *40 Years of Professional Training & Direct Placement*

clc

Space is limited. Call today!

1-415-495-0800
or e-mail us: rebecca.mesa@clcx.com
667 Mission Street, San Francisco, CA 94105

continued from page 24

MicroTimes Stock Index Advances Further Into Record Territory

EXCH	COMPANY	TICKER SYMBOL	CLOSING PRICE 03/31/98	CLOSING PRICE 04/30/98	NET CHANGE IN PERIOD	PERCENT CHANGE IN PERIOD	P/E RATIO	ANNUAL DIVIDEND RATE	ANNUAL DIVIDEND YIELD	ANNUAL HIGH	ANNUAL LOW
	SOFTWARE										
NAS	Adobe	ADBE	45.19	50.06	4.88	10.79	22	0.20	0.40	53.13	33.50
NAS	Autodesk	ADSK	43.13	47.00	3.88	8.99	152	0.20	0.43	51.13	30.50
NAS	Borland	BORL	8.97	10.00	1.03	11.50	-	0.00	0.00	12.19	5.88
NAS	Broderbund (L)	BROD	18.25	17.88	-0.38	-2.05	-	0.00	0.00	37.75	17.50
NAS	Informix	IFMX	8.50	9.88	1.38	16.18	-	0.00	0.00	12.44	4.00
NAS	Macromedia (H)	MACR	14.88	14.94	0.06	0.42	-	0.00	0.00	16.75	6.63
NAS	Microsoft (H)	MSFT	89.50	90.13	0.63	0.70	58	0.00	0.00	99.13	57.44
NAS	Novell	NOVL	10.72	10.00	-0.72	-6.71	-	0.00	0.00	11.13	6.28
NAS	Oracle	ORCL	31.56	25.88	-5.69	-18.02	34	0.00	0.00	42.13	17.75
NAS	Symantec (H)	SYMC	26.94	29.00	2.06	7.66	25	0.00	0.00	31.88	13.63
	HARDWARE										
NAS	Apple (H)	AAPL	27.50	27.38	-0.13	-0.45	-	0.00	0.00	29.63	12.75
NYS	Compaq	CPQ	25.88	28.06	2.19	8.45	30	0.10	0.36	39.75	16.13
NYS	Digital Equipment	DEC	52.25	55.75	3.50	6.70	17	0.00	0.00	62.63	28.38
NAS	Dell (H)	DELL	67.75	80.75	13.00	19.19	63	0.00	0.00	80.75	20.00
NYS	Gateway 2000 (H)	GTW	46.75	58.81	12.06	25.80	78	0.00	0.00	58.88	19.38
NYS	Hewlett-Packard (H)	HWP	63.38	75.38	12.00	18.93	26	0.60	0.80	75.44	50.13
NYS	IBM (H)	IBM	103.88	115.88	12.00	11.55	20	0.80	0.69	120.00	76.00
NYS	Silicon Graphics	SGI	13.94	13.06	-0.88	-6.28	-	0.00	0.00	30.31	10.94
NAS	Sun Microsystems	SUNW	41.72	41.19	-0.53	-1.27	22	0.00	0.00	53.31	27.63
NYS	Tandy (H)	TAN	47.00	49.75	2.75	5.85	28	0.40	0.80	53.25	25.56
NYS	Xerox (H)	XRX	106.44	113.50	7.06	6.64	31	1.40	1.23	114.38	59.00
	CPUs										
NYS	Advanced Micro Devices	AMD	29.06	27.75	-1.31	-4.52	-	0.00	0.00	45.75	17.13
NYS	Cypress Semiconductor	CY	10.13	10.00	-0.13	-1.23	-	0.00	0.00	18.94	7.38
NAS	Intel	INTC	78.06	80.81	2.75	3.52	23	0.10	0.12	102.00	67.38
NYS	LSI Logic	LSI	25.25	27.13	1.88	7.43	26	0.00	0.00	46.88	18.63
NYS	Motorola	MOT	60.75	55.75	-5.00	-8.23	33	0.50	0.90	90.50	52.00
	COMMUNICATIONS										
NAS	3Com	COMS	35.94	34.25	-1.69	-4.70	55	0.00	0.00	59.69	28.25
NYS	AT&T	T	65.75	60.13	-5.63	-8.56	20	1.30	2.16	68.50	31.88
NYS	BellSouth Corp. (H)	BLS	67.56	64.19	-3.38	-5.00	18	1.40	2.18	68.69	42.38
NAS	Cisco (H)	CSCO	68.38	73.25	4.88	7.13	58	0.00	0.00	74.00	31.69
NAS	MCI (H)	MCIC	49.50	50.31	0.81	1.64	-	0.10	0.20	53.00	27.31
NYS	Northern Telecom (H)	NT	64.63	60.88	-3.75	-5.80	49	0.30	0.49	67.00	35.25
	INTERNET										
NAS	EarthLink (H)	ELNK	56.44	70.94	14.50	25.69	-	0.00	0.00	77.00	8.63
NAS	Netscape	NSCP	18.19	27.31	9.13	50.17	-	0.00	0.00	49.50	14.88
NAS	Yahoo (H)	YHOO	92.44	118.94	26.50	28.67	-	0.00	0.00	129.63	19.94
	MEDIA										
NYS	Disney (H)	DIS	106.75	124.56	17.81	16.69	43	0.60	0.48	127.63	73.81
NAS	TCI (H)	TCOMA	31.09	32.25	1.16	3.72	-	0.00	0.00	33.63	12.50

KEY: NYS=NEW YORK ASE=AMERICAN NAS=NASDAQ
(H)=NEW HIGH REACHED IN PERIOD (L)=NEW LOW REACHED IN PERIOD

MARKET DIARY:

ADVANCES	24
DECLINES	13
UNCHANGED	0
NEW HIGHS	18
NEW LOWS	1

MOST ACTIVE ISSUES:

LARGEST DOLLAR GAINER	Yahoo	$ 26.50
LARGEST DOLLAR LOSER	Oracle	$ -5.69
LARGEST PERCENTAGE GAINER	Netscape	50.17 %
LARGEST PERCENTAGE LOSER	Oracle	-18.02 %

	CLOSE 03/31/98	CLOSE 04/30/98	NET CHANGE IN PERIOD	PERCENT CHANGE IN PERIOD
MICROTIMES STOCK INDEX	12466.06	12934.83	468.77	3.76
DOW JONES INDUSTRIAL AVERAGE	8799.81	9063.37	263.56	3.00
STANDARD & POOR'S 500 INDEX	1101.76	1111.77	10.01	0.91
N.Y.S.E. COMPOSITE	572.78	577.37	4.59	0.80
NASDAQ COMPOSITE	1835.66	1868.41	32.75	1.78

CLOSING QUOTES FOR GRAPH:

DATE	MICRO TIMES	DOW JONES
09/25/97	11081.52	7848.01
10/16/97	10985.85	7938.88
12/10/97	10922.72	7978.79
01/14/98	10813.50	7784.69
02/05/98	11808.05	8117.25
03/05/98	11573.81	8445.08
03/31/98	12466.06	8799.81
04/30/98	12934.83	9063.37

Source: Nordby International Inc. (*www.nordby.com*), Boulder, CO.
This information is based on sources believed to be reliable, and while extensive efforts are made to assure its accuracy, no guarantees can be made. Nordby International assumes no liability for any inaccuracies. For information on Nordby's customized financial research services, call (303)938-1877.

The national indices continued to move into uncharted territory during the month ended April 30, as investors remained bullish about the economy. When the buy orders were swept from the floor here is where the national indices stood: The Dow pushed 263.56 points higher, or 3.00%, to a close of 9063.37. The S&P 500 also advanced higher but it lagged behind the Dow's performance, as it gained 10.00 points, or 0.91%, to close at 1111.75.

The Microtimes Stock Index continued to push higher last month, extending on recent gains. Our index jumped 3.76%, or 468.77 points, to close the monthly trading period at 12934.83. In our index, advancers outpaced decliners by a 24–to–13 count, and eighteen companies reached annual highs versus one that fell to a 52-week low.

Turning To Stocks In The Accompanying Table

Shares of Yahoo! surged higher after the company reported profitable first quarter results. Yahoo! watched its stock skyrocket $26.50 per share, or 28.67%, to close the monthly trading session at a price of $118.94. Yahoo! reported revenues totaling $30 million for the first quarter ended March 31, 1998, a 20% increase over revenues of $25 million reported in the fourth quarter ended Dec. 31, 1997 and a 200% increase over the comparable period in the previous year. Net income for the first quarter was $4.2 million or $0.08 per share diluted, compared to a pro forma net income of $2.5 million or $0.05 per share diluted in the fourth quarter ended December 31, 1997. "We continued to experience strong growth in both user traffic and the number of Yahoo! registered members during the quarter," said Tim Koogle, president and chief executive officer of Yahoo!.

Netscape Communications announced that it is rallying Internet content developers to embrace several open standards-based technologies, including JavaScript, XML eXtensible Mark-up Language (XML), and Resource Description Framework (RDF). The announcement helped the company's stock increase 50.17% to a closing price of $27.31, during the period. Since its introduction by Netscape in 1995, more than 175 companies have licensed JavaScript for inclusion in their Internet software tools, helping popularize the scripting language as one of the de facto standards for Internet content developers.

Shares of Oracle headed south after the company told analysts not to expect growth rates to match those of last year. During the monthly trading period, shares of Oracle fell 18.02%, or $5.69 per share, to a closing price of $25.88. The company stated that it is working to increase sales of its applications software where it lags the growth rivals SAP AG, Baan Co., and PeopleSoft. ◆

—Ryan Reichenback

JOIN OUR WINNING TEAM

PCChips AMD K6 MMX

- PCChips TXPro-II, 512K Cache, Pentium Motherbord with 168Pin DIMM+SIMM, onbrd Ultra-IDE, FD, HiSpd I/O, onbrd 16bit AudioSound, onbrd SIS 64Bit Video Port sharing upto 4MB memory, AT Format
- AMD® K6 MMX Processor w/ Smart Cooling Fan
- 32MB 168Pin 10ns SDRAM DIMM
- 1.44MB Floppy Drive
- 3.2GB SamSung UltraDMA IDE HD
- 32X Speed Internal ATAPI IDE CD-ROM
- 15" SVGA Digital Power-Saving Monitor
- Medium Tower Chassis with 230W PowerSupply
- 104 Key Enhanced Windows95 Keyboard
- 2-Button MS Compatible Mouse w/ Premium Pad
- Legitimate MS Windows 95 + Manual+ installed + fully-configured

AMD K6$_{MMX}$
P233 $739
P266 $812
P300 $912

PCChips 440LX AGP

- PCChips motherboard with Intel 430LX chipset PII Motherbord with AGP +PCI support, onbrd 16bit AudioSound, 168Pin DIMM, onbrd Ultra-IDE, FD, HiSpd I/O, AT Format
- Genuine Intel Pentium® II 512K Processor w/ Cooling Fan
- 32MB 168Pin 10ns SDRAM DIMM
- 1.44MB Floppy Drive
- 4.3GB SamSung UltraDMA IDE HD
- 32X Speed Internal ATAPI IDE CD-ROM
- SIS Chipset 3DPro AGP 4MB EDO Video Card w/SVHS TV output
- 17" SVGA Digital Power-Saving Monitor
- Medium Tower Chassis with 230W PowerSupply
- 104 Key Enhanced Windows95 Keyboard
- 2-Button MS Compatible Mouse w/ Premium Pad
- Pair of 100Watt Stereo Speakers
- Legitimate MS Windows 95 + Mar

Intel Pentium® II
266-Celeron $1037
233Mhz $1056
266Mhz $1104
300Mhz $1225
333Mhz $1357

Intel AL440LX Pentium II

- Intel AL440LX Pentium II Motherboard - 440LX AGPset with AGP,Yamaha OPL4 hardware wavetable audio,3 PCI/2 ISA/1 AGP slots, DIMM, Onbrd I/O, UltraDMA PCI IDE (Or choice of ASUS P2L97 motherboard with 16bit Audio Sound Card)
- Genuine Intel Pentium® II 512K Processor w/ Cooling Fan
- 64MB 168Pin 10ns SDRAM DIMM
- 1.44MB Floppy Drive
- 6.4GB SamSung UltraDMA IDE HD
- 32X Speed Internal ATAPI IDE CD-ROM
- Intel new I740 Chip AGP 8MB SGRAM Video Card (DVD ready)
- 17" Hitachi NSA SuperScan Pro CM-620U Monitor
- ATX style Medium Tower 235W ATX PS
- KeyTronic 104 Key Win95 PS2 Keyboard
- Microsoft IntelliMouse with Wheel w/ Pad
- Pair of 100Watt Stereo Speakers

Intel Pentium® II
266-Celeron $1468
233Mhz $1487
266Mhz $1534
300Mhz $1656
333Mhz $1789

33mhz systems for the CGDC (Computer Game Windows hardware engineering conference)

Intel SE440BX Pentium II

- Intel SE440BX Pentium II Motherboard - 233Mhz & above CPU support, 440BX AGPset with Accelerated Graphics Port Connector for optimal Video Graphics, Yamaha OPL4 hardware wavetable audio,3 PCI/2 ISA/1 AGP slots, DIMM, Onbrd I/O, UltraDMA PCI IDE (Or choice of ASUS P2B motherboard with 16bit Audio Sound Card)
- Genuine Intel Pentium® II 512K Processor w/ Cooling Fan
- 64MB 168Pin 100MHz 10ns SDRAM DIMM
- 1.44MB Floppy Drive
- 6.4GB SamSung UltraDMA IDE HD
- 32X Speed Internal ATAPI IDE CD-ROM
- Intel new I740 Chip AGP 8MB SGRAM Video Card (DVD ready)
- 17" Hitachi NSA SuperScan Pro CM-620U Monitor
- ATX style Medium Tower 235W ATX PS
- KeyTronic 104 Key Win95 PS2 Keyboard
- Microsoft IntelliMouse with Wheel w/ Pad
- Pair of 180Watt Stereo Speakers
- Legitimate MS Windows 95

Intel Pentium® II
350Mhz $2146
400Mhz $2362
450Mhz $2686

OUR SERVICE, OUR COMMITMENT

All complete systems are assembled, jumpers and switches setup/configured. Windows 95/NT and all included software installed for testing purpose, high resolution video monitor mode tested and continuously burned in for 48 hours on all components and finally interactively inspected for trouble-free operation. All systems are to be inspected by customer at pick up time.

- Most advertised standard configurations have been pre-built, burn-in tested and are ready to be picked up or delivered within 60 minutes IN FREMONT MAIN OFFICE - Please allow more time for minor configuration changes. Standard delivery time is 72 hours.
- Free delivery area includes local area within 30 minutes driving distance. No delivery on weekends. Delivery out of local area will be charged up to $30 freight.
- Most components come with over 1 year manufacturer warranty - First year will be covered by UMiracle. Warranty after the first year will be covered by component manufacturers.
- While-you-wait immediate service should there be any necessary warranty repair. If we couldn't solve the problem, another system will be built (at our discretion, if purchased within 30 days.)
- All pickups, repairs, exchanges, upgrades can be done in either Fremont, Belmont or Albany store. Original invoices & records required.

ASUS P2B-DS Dual PII AGP

- ASUS P2B-DS Intel Pentium II motherboard - 233-450Mhz Dual Pentium II support, 440BX AGPset with Accelerated Graphics Port Connector for optimal Video Graphics, onbrd Adaptec 7890 Ultra2-Wide SCSI ,4 PCI/2 ISA/1 AGP slots, DIMM, Onbrd I/O, UltraDMA PCI IDE, ATX format
- Genuine Intel Pentium® II Processor(s) w/Cooling Fan(s)
- 128MB 168Pin 100MHz 10ns SDRAM DIMM
- 1.44MB Floppy Drive
- 6.4GB Quantum FireBall SE36400S Ultra-SCSI-2 HD
- 32X Speed Internal ATAPI IDE CD-ROM
- Sound Blaster PCI 64 Sound Card
- Intel new I740 AGP 8MB SGRAM Video Card (DVD ready)
- 19" Hitachi NSA SuperScan Pro CM-751U Monitor
- ATX style Medium Tower 235W ATX PS
- KeyTronic 104 Key Win95 PS2 Keyboard
- Microsoft IntelliMouse with Wheel w/ Pad
- Pair of 180Watt Stereo Speakers

Pentium II Single/Dual
350mhz.$3223/$3872
400mhz.$3439/$4304
450mhz.$3763/$4952

Intel DK440LX PII Dual

- Intel DK440LX Dual Pentium II Motherboard 440LX AGPset - 233Mhz & above Dual CPU support, 440LX AGPset w/ Accelerated Graphics Port Connector for optimal Video Graphics,4 DIMM slots,Onbrd I/O,UltraDMA PCI IDE,onbrd Intel Pro10/100BT Ethernet/Adaptec 7895 Dual Channel SCSI w/ RAIDport slot
- Genuine Intel Pentium® II Processor(s) w/ Cooling Fan(s)
- 128MB 168Pin 10ns SDRAM DIMM
- 1.44MB Floppy Drive
- 6.4GB Quantum FireBall SE36400S Ultra-SCSI-2 HD
- Toshiba XM-6201B 32X Internal SCSI CD-ROM
- Intel new I740 AGP 8MB SGRAM Video Card (DVD ready)
- 19" Hitachi NSA SuperScan Pro CM-751U Monitor
- ATX style Medium Tower 235W ATX PS
- KeyTronic 104 Key Win95 PS2 Keyboard
- Microsoft IntelliMouse with Wheel w/ Pad
- Pair of 180Watt Stereo Speakers

Pentium II Single/Dual
233mhz.$2621/$2825
266mhz.$2670/$2923
300mhz.$2795/$3172
333mhz.$2933/$3447

or sure continue to do business with UMiracle.

Thank you very much and keep up the good work.

Optional Software O/S Upgrade: (from Windows 95 - $90)

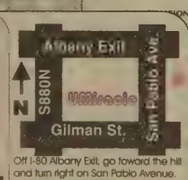
OneYear Next Business Day Bay Area OnSite $60
ThreeYear Next Business Day Bay Area OnSite $150
(COMPLETE SYSTEM ONLY - PLEASE CALL FREMONT OFFICE FOR DETAILS)

* New Intel 350MHz and 400MHz CPUs requires BX Chipset Motherboard and 100MHz DIMM memory

UMiracle

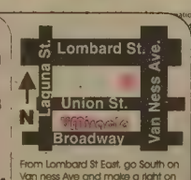
DISCOVER ATM VISA MasterCard

Albany Store
Ph: 510-526-2626
1035 San Pablo Ave. #1
Albany CA 94706
Ph: 510-526-2626
Fax: 510-526-0273
Mon-Sat 9:30AM-6:00PM
CLOSED SUNDAYS



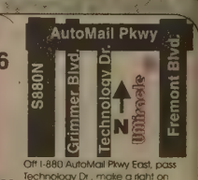
Off I-80 Albany Exit, go toward the hill and turn right on San Pablo Avenue. We are facing U.C. Village. Or off I-80 Gilman St, go toward the hill and make a left turn on San Pablo Ave.

San Francisco
Ph: 415-885-5050
1528 Union Street
San Francisco CA94123
Ph: 415-885-5050
Fax: 415-885-5059
Mon-Sat 9:30AM-6:00PM
CLOSED SUNDAYS



From Lombard St East, go South on Van ness Ave and make a right on Union St. Or going North on Van Ness, turn left on Union, we are on right you hand side.

Fremont Main
Ph: 510-226-3666
44063 Fremont Blvd.
Fremont CA94538
Ph: 510-226-3666
Fax: 510-226-6758
Mon-Sat 9:00AM-6:00PM
CLOSED SUNDAYS



Off I-880 AutoMall Pkwy East, pass Technology Dr., make a right on Fremont Blvd. Or off 680 Durham West pass Osgood, make a left on Fremont, first driveway on your right.

AND BE A WINNER!

TECHNOLOGY TREND:

Looking a couple of more months down the road and into June or July this year, we can expect Intel's new Slot 2 CPUs to be launched. The Slot 2 CPUs will offer an amazing performance increase over Slot 1 PII units and they will be targeted only to the high end market (i.e. servers and high end workstations). The most advanced for these high end CPUs will be the 450NX chipset. It's interesting though, that Slot 2 CPUs will also work with the 2X chipset. Slot 2 will only come with 100 MHz front side bus that also requires 100MHz DIMM.

UPGRADEABILITY

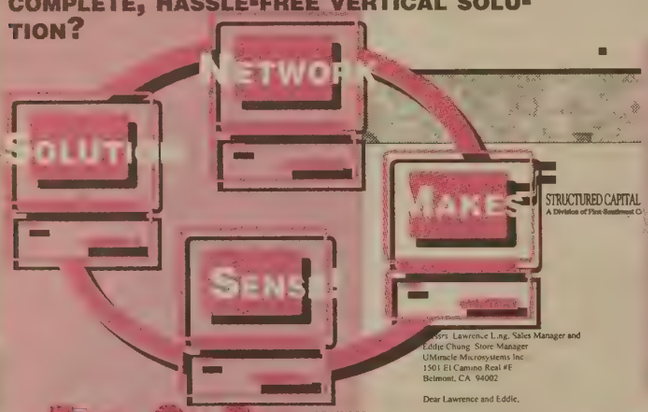
[illegible] CPU upgrade [illegible] you buy an expensive CPU with a mission to [illegible] upgrade from [illegible] that [

- NetWork Design Layout
- Physical Cabling Service
- Server/Client Setup/Customization
- WAN/LAN Connectivity
- Internet/Email Connection
- Equipment Setup/Customization
- Software Design/Installation
- Power and Data Protection
- User/Administrator Training
- Expertise Technical Support
- Maintainence Contract

MIS guys, we know you are tired! Your company depends on your network and your network depends on you! You are paying your consultant to experiment with your hardware! Your hardware provider is claiming your problem is software related but your software vendor says it is not! And your BOSS is pulling your hair!

You thought it was easy? Wish you have known the compatibility problem for your non-returnable purchase? Wish your consultant have known it all?

Don't you know consultants come to UMiracle when they need help? Don't you know you can save money by skipping your VAR? Don't you know you can sit back and relax if UMiracle provides you a complete, hassle-free vertical solution?



Free On-Site Consultation
We Serve Entire Bay-Area

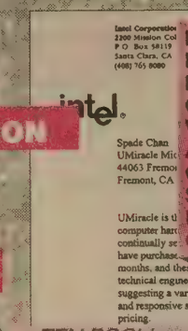
UMiracle Network Solution

Call Toll Free Today!
1888-NET-OKAY x161
(1888-638-6529)

UMiracle Microsystems Corporate Office
44063 Fremont Blvd. Fremont CA 94538
Phone: 510-226-3666 Fax: 510-226-6758

* Equipment Business Lease applies to equipment, cabling & setup labor altogether. Lease payment is based on $1 Purchase Purchase Option. One Time $75 documentation fee are required. Two advanced payments required if approved. Taxes are not yet included. Call for details

LOOKING FOR YOUR DREAM MACHINE AT THE CHEAPEST PRICE? SHOPPING FOR A PC IN THIS RAZOR-THIN-PROFIT INDUSTRY IS DANGEROUS BECAUSE 70% OF THE DEALERS WON'T LIVE TILL THE FOURTH YEAR IN BUSINESS, MOST SELL 3 OR 4 MACHINES A WEEK WITHOUT KNOWING WHAT THEY ARE SELLING AND 99% DON'T WANT TO SEE ANY MACHINE COMING BACK AFTER YOU WALK OUT OF THE DOOR. AT UMIRACLE, WE BUILD HUNDREDS OF PC'S EVERY WEEK, WE TEST EVERY POSSIBLE COMBINATIONS OF SOFTWARE AND HARDWARE FOR COMPATIBILITY, AND WE STAND BEHIND YOUR PC'S LIFETIME LONG! WHY? BECAUSE WE LOVE YOUR PC AS MUCH AS YOU DO! COME BY AND VISIT ONE OF OUR STORES AND YOU WILL FIND OUT WHY YOU WILL BE THE WINNER!


Intel Corporation
2200 Mission Col
P O Box 58119
Santa Clara, CA
(408) 765 8080

intel.

Spade Chan
UMiracle Mic
44063 Fremo
Fremont, CA

UMiracle is u
computer hard
continually se
have purchase
months, and these products have been very reliable. We have also utilized UMiracle's technical engineering staff in the product choosing process which is very good suggesting a variety of choices and cost effectiveness. We choose UMiracle fo and responsive sales team, knowledgeable technical staff, and overall competit pricing.

10 + ONE Network Solution

- *TEN PCChips AMD-K6 233MHz WorkStations w/Licensed Windows 95 (10x$739)*
- *ONE Intel Dakota DK440LX Pentium II File Server w/ Single 266MHz CPU ($3840) w/25 User Licensed NT4.0 Server*
  (See Previous Pages for Workstations and Server Configuration Details)
- *ELEVEN Intel EtherExpress 100BaseT PCI Network Interface Adapters Installed (11x$59)*
- *HP LaserJet 4000N Printer w/10BaseT Connection to Server ($1440)*
- *3COM 3C250B-TX 12-Port SuperStackII 100BaseT Stackable Hub ($1115)*
- *APC Smart-UPS 420Net Un-interruptable Power Supply w/ Setup ($240)*
- *Up to 1100' Catalog5 100BaseT UTP Cabling (InWall w/ Plates - 11 Nodes) (11x$60)*
- *OnSite Windows NT WorkGroup Network Resources and Printer Setup (11x$60)*

Recommended Options:
- *Internet Access + EMail Solution*
- *Disaster Recovery Backup Solution*
- *Fax Server Solution*
- *Network User + Administrator Training*
- *3 Month 24-Hour Response Service Maintainence Contract*

$15994 or
Equipment BusinessLease*
For As Low As
'Call
Per Month 48 Months

20 + ONE Network Solution

- *TWENTY PCChips 440LX AGP PII 266MHz WorkStations w/Licensed Win95 (20x$1104)*
- *ONE ASUS P2B-DS Single PII 350MHz AGP File Server w/25 User Licensed NT4.0 Server ($4393) with Dual 100BaseT PCI NICs each connected to 100BaseT hub for double thoroughput*
  (See Previous Pages for Workstations and Server Configuration Details)
- *TWENTY-TWO Intel EtherExpress 100BaseT PCI Network Interface Adapters Installed ($1298)*
- *HP LaserJet 4000N Printer w/10BaseT Connection to Server ($1440)*
- *TWO -3COM 3C250B-TX 12-Port SuperStackII 100BaseT Stackable Hubs ($2230)*
- *APC Smart-UPS 620Net Un-interruptable Power Supply w/ Setup ($300)*
- *Up to 2100' Cat5 100BaseT UTP Cabling (InWall w/ Plates - 21 Nodes) (21x$60)*
- *OnSite Windows NT WorkGroup Network Printer and Resources Setup (21x$60)*

Recommended Options:
- *Internet Access + EMail Solution*
- *Disaster Recovery Backup Solution*
- *Fax Server Solution*
- *Network User + Administrator Training*
- *6 Month 24-Hour Response Service Maintainence Contract*

$34261 or
Equipment BusinessLease*
For As Low As
'Call
Per Month 48 Months

40 + ONE Network Solution

- *FORTY Intel Seattle SE440BX Pentium II 350MHz WorkStations w/Licensed Win95 (40x$$2146)*
- *ONE Intel R440LX Dual Pentium II 300MHz File Server w/45 User Licensed NT4.0 Server ($6379)*
  (See Previous Pages for Workstations and Server Configuration Details)
- *FORTY Intel EtherExpress 100BaseT PCI Network Interface Adapters Installed (40x$59)*
- *ONE HP LaserJet 5SiMX 100Kpage Monthly DutyCycle •Network Printer ($3580)*
- *FOUR 3COM 3C250B-TX 12-Port SuperStackII 100BaseT Stackable Hubs (4x$1115)*
- *APC Smart-UPS 1000Net Un-interruptable Power Supply w/ Setup ($480)*
- *Up to 4100' Catalog5 100BaseT UTP Cabling (41x$60) (InWall w/ Plates - 41 Nodes plus Wiring Rack)*
- *OnSite Windows NT WorkGroup Network Printer & Resources Setup (41x$60)*

Recommended Options:
- *Internet Access + EMail Solution*
- *Disaster Recovery Backup Solution*
- *Fax Server Solution*
- *Network User + Administrator Training*
- *12 Month 24-Hour Response Service Maintainence Contract*

$108019 or
Equipment BusinessLease*
For As Low As
'Call
Per Month 48 Months

STRUCTURED CAPITAL
A Division of First Southwest C

Lawrence L.ng, Sales Manager and
Eddie Chung Store Manager
UMiracle Microsystems Inc
1501 El Camino Real #E
Belmont, CA 94002

Dear Lawrence and Eddie.

I would like to let you know how pleased we have been with UMiracle Microsystems. The quality of your systems, the speed with which you have allowed my firm to run more

My firm is an investment bankin reliability of our systems is very low prices as well. Also, the kno

Thanks again for your incredible your boss of the good work you a

Sincerely

Gregory J Reiter
Vice President

Internet Access+Email Solution

Internet provides power to business users like you! Exploring your idea, go to internet! Researching your project, go to internet! Making an international call, go to internet! Once you have it, you will hook on it. And to hook on it cheap, you need ISDN Internet Access from UMiracle. We will setup your ISDN line, Get you the right router, Setup your ISP access account, Setup your Email Addresses, Configure your network with TCPIP procotol, all for one package price! Please Call 1888-NET-OKAY x 161 for Details! (Software+Hardware+ISP+Setup Labor)

Fax Server Solution

Don't wait in line for your turn to fax, Don't hand-write your cover page! Fax directly from your desktop, neatly and professionally! With the right Fax Solution, you can receive your fax and print right to your laser printer, reprint your 6 months old fax, fax your documents from your windows application just like printing. All via one line, one modem! Forget about bringng a line and a modem to every desktop! With Sophisticated Fax server software and UMiracle Network Solution technical expertise, We sure can get you the best solution! Please Call 1888-NET-OKAY x 161 for Details! (Software+Hardware+Setup Labor)

Disaster Recovery Backup Solution

You think you got it all backed up? Not until the day your server crashes you will find out you have to 1.) troubleshoot and replace your defective components, 2.) reload your NOS, drivers, applications and backup software, 3.)restore your data files from backup, 4.)reconstruct your user and printer accounts, and 5.)expect missing and corrupted data here and there! Why? Because your backup software backs up only data files, not the opened files, not the security database nor the partition information! BACKUP SOFTWARE DON'T MAKE SENSE UNTIL NOW! With Replica V3 by STAC, you can backup your harddrive partitions as objects, rescue your disaster with a Reboot from a recovery disk, even from a low-level-formated harddrive, and bring your server up in hours! To find out how we can provide this solution, Please Call 1888-NET-OKAY x 161 for Details! (Software+Hardware+Setup Labor)

We Monitor The Trends of Every Technology in the Industry And Get You the Best! Guarantee We Will Take It Back If It Doesn't Work!

* Equipment Business Lease applies to equipment, cabling & setup labor altogether. Lease payment is based on $1 Purchase Purchase Option. One Time $75 documentation fee are required. Two advanced payments required if approved. Taxes are not yet included.

SAN FRANCISCO STORE GRAND OPENING!

Motherboard without CPU (Call for CPU Prices)

PCCHIPS SIS TXPro-II Pentium Motherboard 512K Cache- onbrd Sound Pro Audio, 72+168pin Dimm, Onbrd VGA sharing main board memory (upto 4MB), High-Spd I/O, FD, IDE, AT Form $110

PCCHIPS 440LX Chipset Pentium II Motherboard - onbrd Sound Pro Audio, 72+168pin Dimm, bundled with 4MB AGP SIS Video card, High-Spd I/O, FD, IDE, AT Form $160

A-BIT TX-5 512K TX Pentium/AMD K5/K6 DIMM+SIMM supported, Jumperless, onbrd PCI-IDE, I/O, FD, AT Form (AX-5 in ATX Form) ..... $88($95)

A-BIT LX-6 Pentium II Jumperless 440LX Motherboard, 168Pin DIMM, 1AGP +4 PCI+3 ISA slots, onbrd UIDE, I/O, FD, USB, Soft-Menu, ATX Form $130

A-BIT BX6 Pentium II 350MHz/400MHz Jumperless 440BX 100MHz Bus Motherboard, 168Pin DIMM, 1AGP +4 PCI+3 ISA slots, onbrd UIDE, I/O,FD,USB,Soft-Menu,ATX Form $175

ASUS TX97(L) 430TX Chipset, 512K, Pentium/AMD CPUs, 4 PCI+4 ISA, 168Pin DIMMx3, onbrd UIDE, I/O, AT form factor $125

ASUS TX97-E(L) same as TX97 w/168Pin DIMMx2+72PinSIMMx4 support . $130

ASUS TX97-X(L) same as TX97 w/CreativeLabs Audio, ATX form factor .. $155

ASUS TX97-XE(L) same as TX97-X w/•DIMMx2+72PinSIMMx4 supt $160

ASUS P2L97 Intel Pentium II motherboard - 233-333Mhz support, 440LX AGPset, 5 PCI/2 ISA/1 AGP slots, DIMM, Onbrd I/O, UltraDMA PCI IDE, ATX format $155

ASUS P2L97-S same as P2L97, plus onbrd Adaptec 7880 U-Wide SCSI ... $235

ASUS P2L97-DS same as P2L97, plus onbrd Adaptec 7880 U-Wide SCSI and Dual Pentium II CPU support $380

ASUS P2B/• Intel Pentium II BX chipset motherboard - 233-333Mhz support, 440LX AGPset, 5 PCI/2 ISA/1 AGP slots, DIMM, Onbrd I/O, UltraDMA PCI IDE, ATX format $190

ASUS P2BD/P2B-S/P2B-L/P2B-LS/P2B-DS BX Chipset Boards ..... $360/$342/$252/$390/$492

Intel Atlanta AL440LX Pentium II Motherboard - 233Mhz & above CPU support, 440LX AGPset, Yamaha OPL4 Audio,3 PCI/2 ISA/1 AGP slots, DIMM, I/O, UltraDMA PCI IDE, ATX format $170

Intel Dakota DK440LX Dual Pentium II Motherboard - 233Mhz & above Dual CPU support, 440LX AGPset,4 DIMM slots,Onbrd I/O,UDMA PCI IDE, onbrd Intel Pro100BT Ethernet and Adaptec 7895 Dual SCSI w/RAIDport $525

Intel R440LX Server Platform Pentium II Motherboard - Dual PII CPU support, 4 DIMM (ECC 72Bit SDRAM) slots, Onbrd I/O, UltraDMA PCI IDE, onbrd Intel Pro 100BT Ethernet, Adaptec 7880 UW SCSI port, Cirrus Logic 5446 1MB onbrd VGA, Hardware Server Mgmt, and LANDesk Server Manager Software for NT and Netware $545

Intel Seattle SE440BX Chipset 66MHz/100MHz FrontSide Bus Pentium II Motherboard supporting 350MHz (100x3.5),400MHz (100x4) newest PII CPUs , AGP,Crystal Full-Duplex 16bit Sound, 2 ISA/4 PCI/AGP slots, 3 DIMM Slots upto 384MB, I/O, U-DMA PCI IDE, ATX format $235

Intel Pentium® II processor 233MHz/266MHz/300/333MHz 512KCache .. $Call

Intel Pentium® II Deschutes (100MHz Bus) processor 350/400/450MHz ..... <$590/$790/$Call

Intel Pentium® II Celeron Pentium II based processor ..... $Call

Pentium® 166/200/233MHz MMX CPU ..... $Call

AMD K5/K6 (3D)/Cyrix®6x86MX CPU ..... $Call

72Pin SIMM /168Pin DIMM/SDRAM/EDO/ECC/EEPROM ..... $Call

168Pin DIMM 100MHz Bus for BX Chipset 32M(ECC)/64M(ECC)/128M(ECC) ..... <$80(95)/$150(190)/$320(375)

I/O Card, Controller Card

RaidPort AR01130 with 1MB Cache Hardware Raid 5 for Intel boards ... $320

Adaptec 2940U Ultra SCSI/2940UW SCSI Controller ..... $145/$175

Adaptec NEW 2940U2W Ultra2 SCSI PCI Controller $410

Adaptec AAA-131/AAA-133 RAID 5 Ultra-Wide SCSI-2 Multi-Channel Host Adaptor w/1MB Cache onbrd ..... $419/$619

Diamond Fireport 40 UW-SCSI PCI Controller Single/Dual Channel . $160/260

Network Card

Ethernet NE2000 ISA PnP/Softset 16Bit Combo/PCI Combo ..... $20/$25

Intel EtherExpress Pro 10/100 PCI ENET 32Bit 10-BT $59

3COM Etherlink III 3C509B Combo $65

3COM Etherlink XL 3C900 Parallel-Tasking PCI Combo $75

3COM Fast Etherlink XL 3C905-TX Parallel-Tasking 100BT PCI $65

Video Card

Trident 9685 Windows Accelerator PCI 2MB $35

Trident 9750 3D Windows Accelerator AGP 4MB SGRAM $59

Intel i740 Chipset 8MB x2 AGP Video Card $99

ATI All-In-Wonder PRO - PCI 4MB/8MB AGP 4MB/8MB $220/270/220/270

ATI Xpert@Work OEM - PCI 4MB/8MB AGP 4MB/8MB $122/163/122/163

ATI Xpert@Play OEM - PCI 4MB/8MB AGP 4MB/8MB $140/185/157/195

ATI 4MB memory upgrade for All-In-Wonder/@Work,@Play $40

ATI 3D Charger EDO DRAM AGP 2MB/4MB ..... $60/$75

Matrox MGA Millennium II WRAM AGP/PCI 4MB/8MB ..... $151/$208

Memory module for Millennium II 4MB/8MB/12MB ..... $85/$170/$235

Matrox MGA Mystique 220 2MB/4MB SGRAM OEM $75/99

Maxtrox Productiva G100A SDRAM AGP 4MB/8MB ..... $75/$90

Diamond Stealth 3D 2000 Pro PCI 2MB/4MB EDO DRAM ..... $50/$69

Diamond Stealth 3D 4000 AGP 2MB/4MB SGRAM ..... $65/$79

Diamond VIPER V330 PCI/AGP 4MB SGRAM $155

Diamond FIRE GL1000 Pro 4/8MB, 2/3DLabs Permedia2 Chpst .... $145/$180

Creative Labs 3D Blaster VooDoo2 12MB 3D Accelerator $275

Monitor

14" ShamRock 1Kx768Nlx0.28DP Digital Control Pwr-Saving Monitor $132

15"/17" ShamRock 1280x1KNlx0.28DP Monitor ..... $179/$325

Hitachi NSA SuperScan Pro CM-500U 15" .28DP,1280x1024 ..... $289

Hitachi NSA SuperScan Pro CM-620U 17" .28DP,1280x1024 ..... $495

Hitachi NSA SuperScan Elite CM-630U 17" .22DP,1600x1280x69Hz $615

Hitachi NSA SuperScan Pro CM-751U 19" .22DP,1600x1200@75Hz $844

Hitachi NSA SuperScan Supreme CM-752U 19" .22DP,1.6kx1.2k@80Hz $1000

Hitachi NSA SuperScan Pro 800 21" .22DP,1600x1200x75Hz $1200

Hitachi NSA SuperScan Elite 802/802Plus 21" .22DP,1600x1280 .. $1199/$1350

Hitachi NSA SuperScan Supreme 803 21" .22DP,1800x1440 77Hz $1530

IIYAMA VisionMaster-17 MF-8617E 17" $505

IIYAMA VisionMaster-Pro 17 MT-9017E 17" Diamondtron Tube $545

IIYAMA VisionMaster 450 S-901GT 19" $765

IIYAMA VisionMaster-Pro 21 MT-9021E 21", Diamondtron $1085

IIYAMA VisionMaster-Pro 500 MT-9221 21", Diamondtron $1115

Sony 15"-100ES/100GS 17"-200ES/200GS/200PS 19"-400PS 21"-500PS ..... $315/$360/$595/$655/$800/$1000/$1655

Viewsonic E641/E655/15GA/15GS/17EA/17GA/17PS/PT770/PT775/GT770/G800/G810/PT813/G810/GT800/29GA/P810/P815/etc ..... $Call

NEC A500/E500/A700/E700 ..... $263/$330/$465/$655

Modem

Diamond Supra Max 56K V.90 Internal PCI Fax Voice card $90

USR Sportster 33.6K Faxmodem Internal/External ..... $79/$97

USR Sportster 56K Faxmodem Internal/External ..... $133/$151

USR Sportster 56K Voice Faxmodem Internal/External ..... $153/$168

USR Sportster 56K V.90 Voice Faxmodem w/Spkfone Extrnl USB ready .. $Call

Floppy Drive, Tape Backup

Floppy Drive 1.44M 3.5"/Teac 1.2M 5.25"/1.44M 3.5" ..... $20/$45/23

Colorado 3.2GB T-3000 off floppy Travan w/Win95 Sftwre, w/tape $155

Colorado HP T4i 8GB, 62MB/min, SCSI-2, Travan TR-4, Int., w/tape $355

Colorado HP 5GB, IDE, 648K/s, 85MB/min, 2.5Gb native/5GB compressed, Travan TR-4, Int., w/tape $199

Colorado HP 5GB Travan Tape 1pack/2pack/5pack ..... $26/$50/$120

A:Drive LS-120MB Super FDrive 5X1.44FD spd, read/write 1.44MB $120

Iomega ZIP Drive 100MB w/disk ATAPI IDE -Internal $85

Iomega ZIP Drive 100MB w/disk SCSI-Internal/External ..... $115/$130

Iomega ZIP PLUS Drive 100MB w/disk SCSI /Parallel External $185

Iomega ZIP Disks single/three/six/ten pack ..... $17/$41/$75/$110

Iomega Jaz 1GB w/disk SCSI-Internal/External ..... $258/$270

Iomega Jaz 1GB Disks single/three pack ..... $112/$266

Iomega Jaz 2GB w/disk SCSI-Internal/External ..... $490/$515

Iomega Jaz 2GB Disks single/three pack ..... $146/$385

Tape Cartridge (1/2/5pack) TR1/3/4 . ($24/46/112)($31/60/149)($35/68/167)

4mm DAT tape DDS1-90M/DDS2-120M/DDS3-125M ..... $6/$12/$24

Keyboard, Mice

Mitsumi/KeyTronic104 Enhanced Win95 Keyboard ..... $12/$21

Focus 2001 104 Win95 Key Enhanced Click w/Cover $33

Natural Keyboard SK-6000 Win95 Key Enhanced/with Touch Pad ... $30/$49

MicroSoft Natural ELITE OEM Keyboard V2.0 for Win95/NT $53

MicroSoft Intellimouse with Wheel Serial/PS2 (with System ONLY) $25

Logitech FirstMousePlus with Wheel Serial/PS2 ..... $18

Logitech MousemanPlus 4 Button with Thumb+Wheel Serial/PS2 ..... $52

Logitech Cordless MousemanPro Serial/PS2 ..... $52

Logitech Trackman Marble/Trackman Marble FX Serial/PS2 ..... $68/$84

Software

MS DOS 6.22/Windows V3.11/WFWG V3.11(w/System) $45/55/75

MS Windows 95 CD OSR2.5 /NT V4.0 Workstation w/IE4(w/System) $90/$180

MS Windows NT V4.0 Server with 5 User/25User License OEM $650/1350

MS BackOffice Small Business Server 4.0 with 5 Access License OEM .. $1280

MS Office 97 Small Business Ed./Professional Ed. ..... $199/$550

MS HomeEssential 98 - Word97/Works 97/Money98/Encarta98 Encyclopedia Std/Greeting Workshop/InternetExplorer3.02 ..... $95

Logitech AntiVirus for Windows 95/98 Single User $65

Chassis, Power Supply, Misc.

ATX Mid Tower Chassis with 230W ATX Power Supply $60

GigiStar Series Medium/Full Tower 250W ATX ..... $70/$80

GigiStar Series Mini Tower/DeskTop AT 230W ..... $40/$45

Server Enclosure KS-1400 w/ Dual Redundant Hot-Swappable 300Wx2 PowerSupply, Full-size AT, Baby AT, oversize AT based boards,14-5.25" drive bays, Twelve slots, "snap-in" drive rails, 8 cooling fans, Dims: (DxWxH) 20.5"x16.25"x23.75" $910

RAID Drive Enclosure KS-1000 w/ Dual Redundant Hot-Swappable 300Wx2 PS, 10 Half-Height 5.25" or 5 Full height 5.25" Front Access Drive Bays, 2 Blow-out Fans, Heavy-Duty All-Steel construction Dims: 19.5" x 10" x 24" (DxWxH) $699

Kingston DataSilo Steel 9-Bay Tower- world's most rugged & reliable harddrive enclosure, 9 half-height, 300W load sharing hot swappable Power supplies(2), hot-swappable fans, with UWide SCSI connections(mf#DS500-S9TW) $1189

Kingston DataExpress Steel Enclosures for half-height bays for DataSilo Enclosure (mf#DE100I-SW) $159

Deluxe External SCSI Case w/Terminator+SCSI Cable+P/S+Fan 3.5" Half Height/5.25" Half Height ..... $60/$90

Deluxe External SCSI Case w/68Pin Wide/Ultra Wide SCSI Connector + P/S + Fan 3.5" Half Height with 68Pin External Cable and Terminator $150

CD-ROM Drive

Toshiba XM-6102B 24X Speed Internal ATAPI IDE CD ROM $65

Toshiba XM-6202B 32X Speed Internal ATAPI IDE CD ROM $75

Mitsumi 24X VariableSpeed Internal ATAPI IDE CD-ROM $62

Mitsumi 32X VariableSpeed Internal ATAPI IDE CD-ROM $72

Liton 32X Speed Internal ATAPI E-IDE CD ROM $50

Toshiba XM-6201B 32X Speed Internal SCSI CD ROM $95

Plextor UltraPlex 14/32XSpeed, 2100-4800Kb/sec, Fast SCSI2, 95ms seek, 512K Buffer, SCAM, w/Tray, PX-32TSI internal $189

DVD/CD Recorder/Re-Writer Internal/External ..... $Call

Sound Card/Speaker/MultiMedia Packs

Yamaha, Altec Lansing, Bose, Sony Speakers ..... $Call

100W/180W/240W(RMS) Hi-Fi Amplified Stereo Speakers $15/25/40

3D Stereo Sound Card w/ Wavetable, Full Duplex, 16Bit $20

Sound Blaster 16 PnP OEM $39

Sound Blaster AWE64 PnP Value OEM $70

Sound Blaster AWE64 GOLD PnP w/ IDE Interface Retail $169

Sound Blaster PCI ct4 ..... $95

HardDisk

Maxtor - DiamondMax 2160

4.3GB ULTRA DMA IDE 84320D4 <9.7ms, 33.3Mb/s 256KB, 5200RPM $155

6.4GB ULTRA DMA IDE 86480D6 <9.7ms, 33.3Mb/s 256KB, 5200RPM $218

8.4GB ULTRA DMA IDE 88400D8 <9.7ms, 33.3Mb/s 256KB, 5200RPM $290

SamSung - VG series

3.4GB ULTRA DMA IDE VG33402A 512KB, 5400RPM, 10ms, SMART $135

4.3GB ULTRA DMA IDE VG34323A 512KB, 5400RPM, 10ms, SMART $147

6.4GB ULTRA DMA IDE VG36483A 512KB, 5400RPM, 10ms, SMART $200

Western Digital - Caviar

2.5GB IDE WDAC22500 - UltraDMA 33.3Mb/s 256KB 9.5ms 5400RPM $135

3.2GB IDE WDAC23200 - UltraDMA 33.3Mb/s 256KB 9.5ms 5400RPM $148

4.3GB IDE WDAC24300 - UltraDMA 33.3Mb/s 256KB 9.5ms 5400RPM $177

6.4GB IDE WDAC36400 - UltraDMA 33.3Mb/s 256KB 9.5ms 5400RPM $225

2.1GB UltraWide SCSI-2 Enterprise E2170-7 512KB 7200RPM $369

4.3GB UltraWide SCSI-2 Enterprise E4360-7 512KB 7200RPM $489

9.1GB UltraWide SCSI-2 Enterprise E9100-7 512KB 7200RPM $820

Quantum

2.1GB FireBall SE32100A EIDE UltraDMA 9.5ms, 5400RPM $138

3.2GB FireBall SE33200A EIDE UltraDMA 9.5ms, 5400RPM ..... $[illegible]

4.3GB FireBall SE34300A EIDE UltraDMA 9.5ms, 5400RPM $187

6.4GB FireBall SE36400A EIDE UltraDMA 9.5ms, 5400RPM $238

8.4GB FireBall SE38400A EIDE UltraDMA 9.5ms, 5400RPM $330

2.1GB FireBall SE32100S Ultra-SCSI 9.5ms, 5400RPM $199

3.2GB FireBall SE33200S Ultra-SCSI 9.5ms, 5400RPM $240

4.3GB FireBall SE34300S Ultra-SCSI 9.5ms, 5400RPM $280

6.5GB FireBall SE36400S Ultra-SCSI 9.5ms, 5400RPM $330

8.4GB FireBall SE38400S Ultra-SCSI 9.5ms, 5400RPM $469

Seagate

4.55GB Barracuda 4XL ST34572N Ultra SCSI-2 50pin 7200RPM, 512K ..... $[illegible]

4.55GB Barracuda 4XL ST34572W UWide SCSI-2 68pin 7200RPM, 512K .. $[illegible]

9.1GB Barracuda9 ST19171N Ultra SCSI-2 50pin 7200RPM, 512K ..... $[illegible]

9.1GB Barracuda9 ST19171W UWide SCSI 68pin 7200RPM, 512K ..... $[illegible]

4.55GB Cheetah AV ST34501N Ultra SCSI-2 8.5MS,10000RPM $580

4.55GB Cheetah AV ST34501W UWide SCSI 68pin 7.5MS,10000RPM ..... $[illegible]

9.1GB Cheetah AV ST19101N Ultra SCSI-2 7.5MS,10000RPM ..... $[illegible]

9.1GB Cheetah AV ST19101W UWide SCSI 7.5MS,10000RPM $945

PC UPGRADES & SERVICE WELCOME! OUR TECHNICAL EXPERTS CAN TROUBLESHOOT YOUR PROBLEMS SUPER FAST!

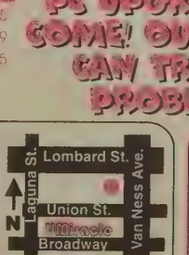
iMiracle
iMiracle MicroSystems
44063 Fremont Blvd. Fremont CA94538
Phone:510-226-3666 Fax:510-226-6758
1035 San Pablo Ave#1. Albany CA94706
Phone:510-526-2626 Fax:510-526-0273
1528 Union St. San Francisco CA94123
Phone:415-885-5050 Fax:415-885-5059
URL:WWW.IMIRACLE.COM
Email: sales@imiracle.com

DISCOVER ATM VISA MasterCard

Albany Store
Ph: 510-526-2626
1035 San Pablo Ave. #1
Albany CA 94706
Ph: 510-526-2626
Fax: 510-526-0273
Mon-Sat 9:30AM-6:00PM
CLOSED SUNDAYS

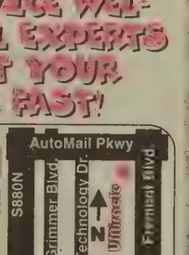
Off I-880 Albany Exit, go toward the hill and turn right on San Pablo Avenue. We are facing U.C. Village. Or off I-80 Gilman St. go toward the hill and make a left turn on San Pablo Ave.

San Francisco
Ph: 415-885-5050
1528 Union Street
San Francisco CA94123
Ph: 415-885-5050
Fax: 415-885-5059
Mon-Sat 9:30AM-6:00PM
CLOSED SUNDAYS



From Lombard St East, go South on Van ness Ave and make a right on Union St. Or going North on Van Ness, turn left on Union, we are on right your hand side.

Fremont Main
Ph: 510-226-3666
44063 Fremont Blvd.
Fremont CA94538
Ph: 510-226-3666
Fax: 510-226-6758
Mon-Sat 9:00AM-6:00PM
CLOSED SUNDAYS



Off I-880 AutoMall Pkwy East, pass Technology Dr., make a right on Fremont Blvd. Or off 680 Durham West, pass Osgood, make a left on Fremont, first driveway on your right.

Excellent Computers & Networks Since 1990

POWER SERVER
INTEL DUAL PENTIUM® II

- Intel DK440LX AGP Motherboard
- 64MB High Performance SDRAM (10ns)
- 1.44 Floppy Drive
- 4.3GB Ultra-Wide SCSI Hard Drive
- Diamond 3D 2000 Pro w/2MB
- Toshiba 32X CD-ROM Drive
- Intel EtherExpress Pro 10/100 Network Card
- Adaptec 7895 Dual Channel SCSI w/RAID Support
- Yamaha Sound Card w/120-Watt Stereo Speakers
- Deluxe ATX Full Tower w/3 Cooling Fans
- Mitsumi Windows 95 Keyboard
- Microsoft PS/2 Mouse w/Pad Monitor Sold Separately

Intel PII MMX 266 $1488

Intel Pentium® II MMX 300 ..... **$1588**
Intel Pentium® II MMX 333 ..... **$1688**

DUAL PERFORMER
INTEL DUAL PENTIUM® II

- Asus P2B-D 440BX Motherboard w/512K Cache
- 64MB SDRAM
- 4.5GB Ultra IDE Hard Drive
- 1.44 Floppy Drive
- Diamond 3D 2000 Pro w/4MB
- Intel EtherPro + 100Mbp Network Card
- ATX Full Tower Case w/300 Watt PS
- Mitsumi 104 Keyboard
- PS/2 Mouse w/Pad
- Toshiba 32X Speed CD-ROM
- Yamaha 3D Sound Card 120 Watt Speakers
- Monitor Sold Separately

NETWORK READY

Intel Pentium® II MMX 266 ..... **$1288**
Intel Pentium® II MMX 300 ..... **$1458**
Intel Pentium® II MMX 333 ..... **$1558**
Intel Pentium® II MMX 350 ..... **$1658**
Intel Pentium® II MMX 400 ..... **$1888**

ENTERPRISE PRO
INTEL PENTIUM® II

- Intel AL440LX AGP Motherboard w/512K Cache
- 32MB High Performance SDRAM
- 1.44 Floppy Drive
- 4.3GB EIDE Hard Drive
- Diamond 3D 2000 Pro w/4MB
- Toshiba 32X CD-ROM Drive
- Intel Etherpro 100Mbp Network Card
- Yamaha 3D Sound Card
- 120-Watt Stereo Speakers
- Deluxe ATX Medium Tower
- Mitsumi Windows 95 Keyboard
- PS/2 Mouse w/Pad
- Microsoft Windows 95 w/CD & Manuals
- 17" SVGA Color Monitor

Intel PII MMX 233 $1188

NETWORK READY

Intel Pentium® II MMX 266 ..... **$1338**
Intel Pentium® II MMX 300 ..... **$1458**
Intel Pentium® II MMX 333 ..... **$1558**

BUSINESS 3D PRO

- Intel ASUS P2L97 Motherboard w/512K Cache
- 32MB SDRAM 10ns
- 3.2GB Enhanced IDE Hard Drive • 1.44 Floppy Drive
- Diamond 3D 2000 Pro w/4MB
- Diamond Monster 3D W/4MB
- 24X CD-ROM Drive • 56K Fax/Modem w/Voice
- Deluxe ATX Medium Tower
- Yamaha 3D Sound Card
- 120-Watt Stereo Speakers
- Mitsumi Windows 95 Keyboard
- PS/2 Mouse w/Pad
- Microsoft Windows 95 w/CD and Manuals
- 15" SVGA 0.28 Color Monitor

Intel PII MMX 233 $1158

Intel Pentium® II MMX 266 ..... **$1258**
Intel Pentium® II MMX 300 ..... **$1388**
Intel Pentium® II MMX 333 ..... **$1488**
Intel Pentium® II MMX 350 ..... **$1758**
Intel Pentium® II MMX 400 ..... **$1988**

HOME OFFICE PRO

- Intel 440LX AGP Motherboard w/512K Burst Cache
- 32MB 10ns SDRAM
- 2.1GB Ultra DMA IDE Hard Drive
- 1.44MB Floppy Drive
- S3 PCI SVGA 2MB w/MPEG
- 24X CD-ROM Drive
- 33.6 Int. Fax/Modem w/Voice
- Yamaha 3D Sound Card
- 120-Watt Stereo Speaker
- PS/2 Mouse w/Pad
- Mitsumi Windows 95 Keyboard
- Deluxe ATX Mid Tower
- Windows 95 CD & Manuals
- 14" SVGA Color Monitor .28dp

Intel PII MMX 233 $888

Intel Pentium® II MMX 266 ..... **$988**
Intel Pentium® II MMX 300 ..... **$1088**
Intel Pentium® II MMX 333 ..... **$1258**

MULTIMEDIA VALUE

- Asus SP 97 Motherboard w/512K PB Cache
- 16MB EDO RAM, 60ns
- 2.1GB EIDE DMA Hard Drive
- 1.44 Floppy Drive
- 24X CD-ROM Drive
- PCI SVGA w/1MB MPEG
- 33.6 Fax/Modem w/ Voice
- Yamaha 3D Sound Card
- 120-Watt Stereo Speakers
- Mitsumi Windows 95 Keyboard
- Deluxe Mini Tower
- MS Compatible Mouse w/Pad
- Microsoft Windows 95 w/CD & Manuals
- Monitor Sold Separately

Intel 200MMX $558

INTERNET READY

Intel Pentium® MMX 233 ..... **$598**
AMD K6 MMX 200 ..... **$538**

1-Year On-Site Service Included Nationwide!

14" PERFORMER NOTEBOOK

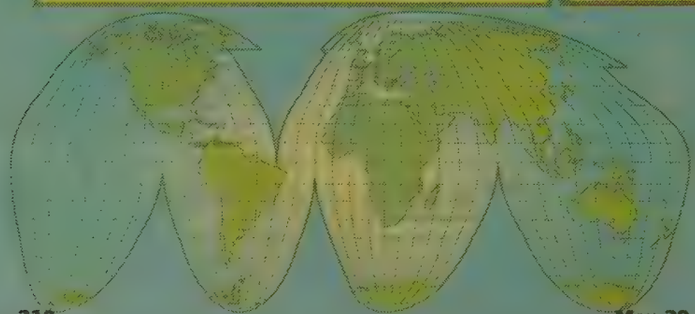
- 14.2" Active Matrix Color Screen
- 512K L2 Cache
- 20X CD-ROM
- 1.44 Floppy Drive
- 16-Bit Sound Card
- 4MB Video RAM, MPEG
- 2V Port for MPEG Card Supports CDi Movies
- One TV-Out Port for Display on TV Set
- Built-in Infrared Port for Wireless Remote Communications
- PCMCIA Slot
- Pointing Device
- Li-Ion Battery
- Carrying Case

14.2" TFT Display	CPU	2.1 GB	3.2 GB	4.0 GB
w/32MB 20X CD	200 MMX	$2099	$2159	$2299
	233 MMX	$2159	$2199	$2359

12" MULTIMEDIA NOTEBOOK

- 256K L2 Cache
- 20X CD-ROM
- 3.5" Floppy Drive
- 16-Bit Stereo Sound System
- 2MB Video RAM, MPEG
- One PCMCIA Type III or Two Type II Slot
- ZV Port for MPEG Card Supports CDi Movie
- Multiple I/O Ports
- One TV-Out Port for Display on TV Set
- Built-in Infrared Port forWireless Remote Communication
- Ni-MH Duracell Smart Battery System
- Touch Pad Pointing Device

12.1" Display	CPU	Dual Scan	Active Matrix
w/16MB	200 MMX	$1299	$1359
2.1GB, 20X CD	233 MMX		$1559



1503 North Milpitas Blvd.
Milpitas, CA 95035
Tel: (408) 263-8088 • Fax (408) 263-4588
Hours M-F 9-7, Sat 10:30-4

Visit Our 3000' Showroom • 1000s of Items in Stock!

CPUs

Intel Pentium® Pro 150/180/200MHz ..$148/189/488
Intel Pentium® MMX CPU
166/200/233MHz ..$99/109/128
AMD K-6 166/200/233MHz MMX ..$79/89/99
Intel Pentium® II 233/266MHz MMX ..$189/249
Intel Pentium® II 300/333MHz MMX ..$359/479
Intel Pentium® II 350/400MHz MMX ..$599/789

MOTHERBOARDS

INTEL

"Providence" Dual Pentium® Pro (ATX) ..$208
"Venus" Pentium® Pro (ATX) ..$89
"Anchorage" Pentium® w/512K (ATX) ..$108
"Atlanta" Pentium® II 440LXA ..$138
"Dakota" Dual Pentium® II 440LXA ..$468
"Seattle" Pentium® II 440BX ..$208
"Washington" Dual Pentium® 440BX ..CALL

ASUS

P2L97 (ATX) ..$128
P2L97S ..$218
P2L97D ..$258
P2L97DS ..$338
P2B98 Intel 440BX ..$185
P2BD Intel 440BX Dual Pentium® II ..$318
TXP4 w/512K PB (AT) ..$98
TX97E w/512K PB (AT) ..$108
TX97XE w/512K PB (ATX) ..$118
TX97X w/Audio w/512K PB (ATX) ..$168

CD-ROMS

TOSHIBA

32X EIDE ..$78
24X EIDE ..$68
32X SCSI ..$108

MITSUMI

24X EIDE ..$68

CD-WRITER

HP

SureStore C6020I 6X Read 2X Write ..$399

YAMAHA (Retail)

CDR-4260i 6X 4X 2X Rewriteable (SCSI) Int. ..$558
CDR 4260I 6x4x2 Rewriteable (IDE) Int. ..$399
CDR 4260E 6x4x2 Rewriteable (SCSI) Ext. ..$599

PANASONIC

4x8 SCSI CDR ..$399

MULTIMEDIA

SOUND CARD & SPEAKERS

16-Bit SB Compatible ..$19

CREATIVE LABS

Sound Blaster 16 PnP ..$46
Sound Blaster 16 IDE PnP ..$58
Sound Blaster 64 AWE PnP Retail Box ..$118
Sound Blaster 64 AWE & Gold w/4MB ..$158
Sound Blaster SB Encore DVD Kit NEW! ..$258

YAMAHA

M7 Speaker ..$48
M15 Speaker ..$78
System 35 w/subwoofer ..$149
System 45 w/subwoofer ..$189

BIG SCREEN MONITOR SUPER SALE

SONY
17" 200ES TRINITRON 1280x1024 .25DP PNP
$488

15" 100ES 1280x1024 .25dp SVGA ..$288
17" 200ES 1280x1024 .25dp SVGA ..$488
17" 200GS 1600x1280 .25dp SVGA ..$588
19" 400PS 1600x1200 .25dp SVGa ..$868
20" 20SE2T 1600x1280 .25dp SVGA ..$1458
21" 500PS 1600x1280 .25dp SVGA ..$1288

VIEWSONIC
21" P815 1800x1440 .25DP PNP
$1158

17" G771 1280x1024 NI .28dp SVGA ..$398
17" PT770 1600x1280 NI .25dp ..$568
17" PT775 1600x1280NI .25dp ..$608
19" G790 1600x1280 .26dp ..$748
20" G800 1600x1280 .28dp ..$888
21" G810 1600x1280 .25dp ..$958
21" P810 1600x1280 .25dp ..$1068
21" PT813 1600x1280 .25dp ..$1238
21" P815 1800x1440 .25dp ..$1158
29" 29GA ..$1999

NEC
17" A700 1280x1024 SVGA PNP
$458

15" A500/E500 ..$258/$318
17" A700/M700 ..$458/$618
21" P1150 1600x1280 .28dp ..$1178

NANAO

17" FX-C5 1280x1024 .28dp SVGA ..$688
17" TXC-7S 1600x1280 .25dp SVGA ..$988
21" FX-E7 1600x1280 .28dp SVGA ..$1618

IIYAMA
19" VISIONMASTER 450
$758

17" 9017E 1600x1280 .25dp SVGA ..$538
19" 450 1600x1200 .26dp SVGA ..$759

SONY (OEM)
20" 1600x1280 TRINITRON .25dpi
$1099

15" 1280x1024 .25dp ..$269
17" 1280x1024 .25dp ..$489
20" 1600x1280 .25dp ..$1099

VIDEO CARDS

S3 775 PCI Video MPEG 1MB ..$25
S3 3D MPEG 2MB EDO ..$35
S3 3D MPEG 4MB EDO ..$48

ATI

3D Pro Turbo PC2TV 8MB SGRAM ..$163
3D Expert Work 4MB AGP ..$78
3D Expert Work 8MB AGP ..$98
3D Expert Play PC2TV 4MB AGP ..$98
3D Expert Play PC2TV 8MB AGP ..$118
All-in-Wonder Pro 4MB AGP ..$218
All-in-Wonder Pro 8MB AGP ..$258

DIAMOND

Stealth 3D 2000 PCI 2MB/MPEG EDO ..$45
Stealth 3D 2000 PCI 4MB/MPEG EDO ..$58
Stealth 3D 4000 4MB AGP ..$78
Fire GL 1000 Pro 8MB AGP ..$168
Fire GL 1000 Pro 4MB AGP ..$138
Viper 330 4MB AGP ..$88
Viper 330 4MB PCI ..$88
Monster II 3D 4MB ..$198

NUMBER 9

Imagine 128 Series 2 4MB VRAM ..$299
Imagine 128 S2E 2MB VRAM ..$99

MATROX

Millennium II 4MB/8MB PCI ..$118/188
Millennium II 4MB (Retail Box) AGP ..$168
Millennium II 8MB (Retail Box) PCI ..$208
Millennium II 4MB/8MB AGP ..$128/190
Mystique 220 4MB SGRAM (Retail Box) ..$108

SCSI CONTROLLER CARDS

ADAPTEC

2842 SCSI VLB ..$178
2940 U SCSI PCI ..$149
2940 UW SCSI (Ultra Wide) PCI ..$169
3940 SCSI PCI ..$299
3940W SCSI PCI ..$469

TAPE BACK-UP DRIVES

IOMEGA

ZIP Drive
100MB External Parallel ..$158
100MB Insider IDE ..$98
100MB Cartridge ..$18
JAZ Drive
1.0GB SCSI Drive Insider ..$299
1.0GB SCSI Drive External ..$399
2.0GB SCSI Int. ..CALL
1.0GB Cartridge ..$128

HP/COLORADO

T3000 3GB Int ..$189
C1536 4mm Dat 2-4GB SCSI Int ..$638
C1599 4mm Dat 4-8GB SCSI Int ..$799
HP Mounting Kit to 5.25" ..$38

SCSI HARD DRIVES

IBM

DORS-32160 2.1GB Ultra SCSI ..$289
ACAS-32160 2.1GB Ultra Wide SCSI-3 ..$299
DCAS-34330 4.3GB Ultra SCSI-2 ..$389
DCAS-34330W 4.3GB Ultra Wide ..$399

QUANTUM

TM1280S Fireball 1.28GB Ultra SCSI-3 ..$258
TM32110S Fireball 2.1GB Ultra SCSI-3 ..$328
AL32275SW Atlas II 2.3GB Ultra Wide ..$459
AL34550S Atlas II 4.5GB Ultra SCSI-3 ..$599

NETWORKING SERVICES

• COMPLETE SETUP
• INSTALLATION
• TROUBLESHOOTING
• ON-SITE MAINTENANCE
• INTRANETS
• E-MAIL SERVERS

Networking Router, Hub & Switch

3Com® ASCEND

3COM

3C509 TPO ..$38
3C509 Combo ..$68
3C900 PCI TPO ..$68
3C900 PCI Combo ..$85
3C905 TX PCI 10/100 ..$68
3C16700 TPO 8 Port Office Connect Hub ..$145
3C16701 TPC 8 Port Office Connect Hub ..$185
3C16710 TPM 8 Port Office w/Management ..$448
3C16901 Linkswitch 1000 12 Port ..$2449
3C166671 SuperStack 24 Port ..$839

INTEL

EtherExpress Pro 10 Combo ..$98
EtherExpress Pro 100 PCI PILA8465B ..$55
12 Port EC100EKGP 100Mbps Hub ..$888

ASCEND

ISDN Pipeline 25 Single ..$589
ISDN Pipeline 25 NTI ..$619
ISDN Pipeline 25 NTI & Compression ..$789
ISDN Pipeline 50 Single ..$719
ISDN Pipeline 50 NTI ..$859

CISCO/BAY NETWORKS

Switch ..CALL
Hub ..CALL
Router ..CALL

WORLD NET

16-Bit NE2000 Combo ..$20
PCI 10/20 Mbps Combo ..$29
PCMCIA Ethernet Card ..$79
5-Port Hub ..$49
9-Port Hub ..$69
100/10Mbps 2 Port Switch Hub ..$299
4-Port 100Mbps Fast Ethernet Hub ..$259
8-Port 100Mbps Fast Ethernet Hub ..$299
12-Port 100Mbps Fast Ethernet Hub ..$599
12-Port 100Mbps Fast Ethernet w/Fiber Module Hub ..$899

NOVELL

Netware 3.12 ..BEST PRICE
Netware 4.11 ..BEST PRICE

WORLD-NET MICROSYSTEMS INC.

TERMS AND CONDITIONS:

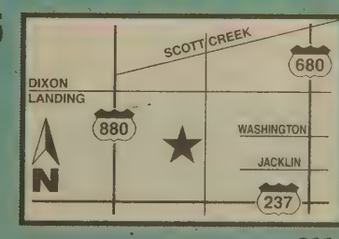
1. Lifetime Labor and One Year parts Warranty on all Computers.
2. Knowledgeable technical support engineers in service.
3. Prices and availability subject to change without notice.
4. Shipping, insurance and COD charges are extra and nonrefundable.
5. Return shipping must be insured, prepaid and bearing an RMA# on the shipping label.
6. Defective items replaced or repaired at our discretion.
7. Not responsible for typos.
8. All returns subject to 15% restocking fee and cover only World-Net Microsystems brand computers; excludes peripherals and software. No refunds after 30 days.
9. Superior reputation for service, quality and value.
10. Purchase orders are welcomed and subject to approval.
11. Price reflects cash discounts.

1503 North Milpitas Blvd., Milpitas, CA 95035

Tel: (408) 263-8088

Fax: (408) 263-4588

Corporate, Government, & Education POs Welcome



advertisersindex

Classified advertising section starts on page 189

9 NET AVENUE 2E
A&A TECHNOLOGY 97
AAA MEDIA 50
ABIT COMPUTER CORPORATION 26, 27
ACER FACTORY OUTLET STORE 18
ACME MICROSYSTEMS 218
AIM COMPUTER 122
ALPHA TELECOM, INC. 88
AMERICA COMPUTERS 85
AMERICAN MULTI SYSTEMS 168
AMT INTERNATIONAL 116
APPRO INTERNATIONAL 18P
ARESCOM 37
ARISE COMPUTER 49
AROMA COMPUTER 118, 119
A.R.T. MULTIMEDIA SYSTEMS 121
BAY AREA MICRO, INC. 109–111
BCSA COMPUTERS 107
BELMONT SYSTEMS 126, 127
BENITEK COMPUTER 71
BESQ SYSTEMS 12, 13
BETA 90'S 8
BG COMPUTER 81
BOLD DATA TECHNOLOGY 18H, 18I
CALIFORNIA LS 14
CALLAN CORP. 133, 139
CCG / MACBYTE 137
CELAN TECHNOLOGY 130
CENTRAL COMPUTER 52, 60–69
CENTURY GRAPHICS 32
CHEM USA CORPORATION 2J
CHICOTEC 54
CKNS INTERNET 139
COMP EXPRESS 55
COMPU D 134, 179, 188
COMPUMART 153
COMPUTER LEARNING CENTER 42
COMPUTER RENAISSANCE 42
COMPUTER SOURCE 219
COMPUTER SYSTEM OUTLET 24
COMPUTER XTRAS XPRESS 76
COMPUTOWN 29
COMTEK COMPUTERS 95
CONCENTRIC NETWORK 2H
CPU & MEMORY EXCHANGE CLUB 135
CYBER TEK COMPUTER 162
CYBERVISION 2B
CYPRESS COMPUTER 31
CYRIX 2K
D NET 4
DECAVIEW 2F, 2G, 18O
DIAMOND LANE 144
DISK DRIVE DEPOT 3
DJ COMPUTERS 83
DOMINO COMP 77
EDC SYSTEMS 78
EDIMAX COMPUTER CORP. 35, 156
ELECTRICITI INC 18T
ENVISIONS SOLUTION TECHNOLOGY 11
EPOCH INTERNET 43
EVERGREEN COMPUTERS INT. 146–147
EVERNET EDUCATION 160
FASTLINK NETWORK PRODUCTS 89
FINE TEC 59
FOR U COMPUTER 56
FORTUNE MICRO 120
FUTURE COMPUTING SOLUTIONS 57
GIGABYTES 32
GOLDEN MICRO COMPUTERS 91
GOLDEN VALLEY SYSTEMS 99
GRANITE DIGITAL 46
GREENLEAF DISTRIBUTION 26, 27
HALTED SPECIALTIES 73
HD SYSTEMS 34
HI-TECH USA 213–217
HIQUALITY SYSTEMS 18M
HITRON SYSTEMS 166, 167
HKG COMPUTERS 129
HOST PRO/NET LIMITED 18Q
HYPERSURF INTERNET SERVICES 145
ICONIX 174
IDT WINCHIP C6 21
IIYAMA 36
INPUT AUTOMATION 23
INREACH INTERNET 18, 18A
INTERPRO 131
IQ INFOQUEST 44, 45
ITS CD 46
J&K TECHNOLOGY 75
JPS NET 18N
KINGSTAR COMPUTER 9, 148
K SQUARE COMPUTER 47
LAITRON 100–105
LEGEND COMPUTER 25
LEX MICRO SYSTEMS 157
LINDEN MICRO TECH 142, 143
LJ SYSTEMS 18R, 18S
MAC 125
MACBYTE 137
MACTICA 76
MAGIC COMPUTER 163
MARIN COMPUTER RESOURCE 18J, 18K
MARKET PRO 178
MDI TECHNOLOGY 21
MEDIA ON 18B, 18C
MEMORY WORLD 80
MERIDIAN COMPUTER SYSTEMS 113
MIC COMPUTER 5
MICRO GATE 212
MICRO SONIC COMPUTER 19
MICROSOFT 2C
MINI MICRO SUPPLY 26, 27, 33
MICROTIMES QUOTATION HOTLINE 52, 53
MICROTIMES SUPERSTOPS 186, 187
NCAL COMPUTER SOURCE 158, 159
NETIS TECHNOLOGY 149
NETWORK ASSOCIATES 151
NEW RIVER 115
OMNICOM 78
PALO ALTO MICRO 145
PC DOCTOR 22
PC TEN 117
PERFECT SOLUTION MULTIMEDIA 161
PIXEL USA 184, 185
POLYWELL COMPUTERS 16, 17
PROVEN TECHNOLOGY 41, 178
QUICK DATA 72
RIX TECHNOLOGY 18L
ROBERT AUSTIN CORP. 177
SAMPO 2L
SCEPTRE 2A, C3
SILICON VALLEY SQUARE 174
SILICONRAX 2D
SLIP.NET 7
SMART PAGE 40
STARLITE ELECTRONICS 86, 87
STORAGE SYSTEMS ENGINEERING 70
SUPERCOM C2, C4
SWEET MEMORY 15
TSOFT 138
T ZONE CORPORATE RESEARCH 51
UMIRACLE MICROSYSTEMS 206–209
UNITED MICRO SYSTEMS 39
UNIVERSAL COMPUTER PRODUCTS 141
USM DISTRIBUTORS 115
UTRON 18D–18G
VALUE NET INTERNET SERVICE 181
VARIANT MICROSYSTEMS 173
VERIO NORTHERN CA. 150
WEIRD STUFF WAREHOUSE 79
WESTECH MICRO 212
WORLD NET MICROSYSTEMS 210, 211
YNN (MIBX) 175

YOUR SCANNER CENTER

HUGE SOFTWARE SELECTION!

BEST SOFTWARE PRICES!

MICROGATE

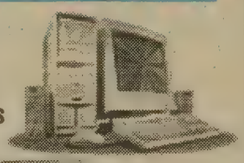
Your Downtown Connection

Notebooks • Desktops • Accessories • Repair • Upgrades

Lowest Prices in the City

DESKTOP CENTER

- Custom-Built Systems
- CPUs • Video Cards
- Hard Drives • Floppies
- Monitors • Fax Modems
- Video • Conferencing
- Scanners



NEW

900MHz Wireless

COMPAQ SAMSUNG HEWLETT PACKARD WESTERN DIGITAL CITIZEN Seagate U.S.Robotics brother

PORTABLE CENTER

- Solutions
- Upgrades
- RAM
- PCMCIA Modems
- Portable Computers
- Palm Top Computers

SONY FUJITSU U.S.Robotics COMPAQ TOSHIBA HITACHI CITIZEN

SOFTWARE CENTER

Best Prices on Microsoft 98

SYMANTEC IBM Microsoft Adobe

SERVICE CENTER

- PC Repair
- Upgrade Specials
- Fast Turnaround Service
- Lowest Rates in the Bay Area
- Custom Configuration
- System Troubleshooting
- Lowest Corporate Rate

You Pay Less Here!

LOGITECH CENTER

Logitech MouseMan 96 $18

Logitech Trackman Marble $49

Wingman Extreme Digital $29

PageScan Color $79

All Logitech Liquidation/Refurbished Products Carry 90-Day Warranty

DIGITAL CENTER

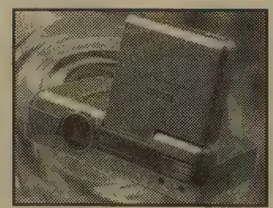
Kodak

OLYMPUS

RICOH

HITACHI

SONY



(415) 421-4283

690–A Market Street, San Francisco CA 94104

Open Mon.-Sat. 9-7 p.m., Sun. 9-6 p.m.

This index is provided as an additional service. Although we do our best to maintain accuracy, the publisher does not assume liability for errors or omissions.

HI-TECH USA
ALWAYS THE BEST

www.HiTech-USA.com

SAN FRANCISCO STORE OPEN ON SUNDAY 10AM TO 4PM

(408) 262-8688.....Milpitas
(408) 732-8688.....Sunnyvale
(650) 401-8688.....San Mateo
(415) 753-6888.....San Francisco
(510) 843-8688.....Berkeley

FOR SPARC WORKSTATIONS OR LINUX /SOLARIS /SCO /UNIXWARE /NT SERVER
PLEASE CALL (888) 868-8778

CORPORATE, GOVERNMENT, AND EDUCATION ORDERS WELCOME. LEASING & FINANCING AVAILABLE.

ALWAYS THE BEST

- PERFORMANCE – Including major brand name components: Intel! Cyrix! AMD! Western Digital! Maxtor! Quantum! Seagate! 3COM! Sony! NEC! Viewsonic! Adaptec! Matrox! ATI! Diamond! US Robotics! Iomega! to name a few.
- WARRANTY & SERVICE – 2 year parts / 2 year labor warranty on Hi-Tech USA PC Systems
- RESPONSIVENESS – Custom configurations, rapid delivery times, excellent follow-up and support to meet your needs!
- PRICE– nobody beats our prices!
- MEANS ALWAYS THE BEST VALUES

HI-TECH DVD *Multimedia Systems*

PENTIUM II-400
BUSINESS LEASE
$83/MONTH

$2348

- **64MB RAM** (128MB: Add $Call)
- **8.4GB EIDE**
- **2X DVD ROM w/decoder card**
- **US Robotics 56.6 Fax Modem (Internet Ready)**
- **Matrox Millenium II 8MB AGP or PCI**
- Sound Blaster AWE64 Value or Yamaha Sound (intel inside)
- Yamaha Speakers
- TEAC 1.44MB 3.5" Floppy Drive
- Full Tower Case with Power Supply
- Keytronics Keyboard for Windows 95
- Microsoft Mouse with Pad
- Free Microsoft Windows 95
- **Free Microsoft Home Bundle**

Pentium II-400 (Intel Seattle BX) $2348
Pentium II-350 (Intel Seattle BX) 2148
Pentium II-333 (Intel Atlanta) ATX 1898
Pentium II-300 (Intel Atlanta) ATX 1768
Pentium II-266 (Intel Atlanta) ATX 1648
Pentium II-333 (Asus M/B) ATX.....1888
Pentium II-300 (Asus M/B) ATX.....1758
Pentium II-266 (Asus M/B) ATX.....1638
Dual Pentium II-333 (Asus) w/1CPU.....2088
MMX-P233/512K (Intel Anchorage) ATX .1498
MMX-P200/512K (Intel Anchorage) ATX .1478

Upgrade With System

- Ilyama 9017E/8515G.....$568/248
- 30-Bit Color Flatbed Scanner.....88
- Windows NT 4.0 10 Client Server.....Best

HI-TECH SUPER *Multimedia Systems*

PENTIUM II-266
BUSINESS LEASE
$43/MONTH

$1228

- **64MB RAM** (128MB: Add $Call)
- **4.3GB EIDE** (6.4GB: Add $20)
- **32X CD-ROM** (2X DVD ROM: + $160)
- **56.6 Internal Fax Modem w/Voice** (US Robotics 56.6: +$40) Internet Ready
- ATI Xpert 4MB AGP or PCI (8MB: +$30)
- Sound Blaster AWE64 Value or Yamaha Sound (intel inside)
- Yamaha Speakers
- TEAC 1.44MB 3.5" Floppy Drive
- Mid Tower Case with Power Supply
- Keytronics Keyboard for Windows 95
- Microsoft Mouse with Pad
- Free Microsoft Windows 95
- **Free Microsoft Home Bundle**

Pentium II-400 (Super Micro or Asus BX) 1868
Pentium II-350 (Super Micro or Asus BX) 1678
Pentium II-333 (Super Micro) ATX.....1448
Pentium II-300 (Super Micro) ATX.....1318
Pentium II-266 (Super Micro) ATX.....1198
Pentium II-333 (Intel Atlanta) ATX 1478
Pentium II-300 (Intel Atlanta) ATX 1348
Pentium II-266 (Intel Atlanta) ATX 1228
PP-180 (Intel Venus) ATX.....1048
MMX-P233/512K (Asus SP97).....1018
MMX-P200/512K (Asus SP97).....988

Upgrade With System

- Sony 200GS / 100ES $588/278
- 30-Bit Color Flatbed Scanner.....88
- Windows NT 4.0 Workstation .....Best

HI-TECH PROFESSIONAL *Multimedia Systems*

MMX-P233
BUSINESS LEASE
AVAILABLE

$838

- **32MB RAM** (64MB: Add $Call)
- **2.0GB EIDE** (4.3GB: +$30)
- **24X Max CD-ROM** (32X: +$10)
- **56.6 Internal Fax Modem w/voice** (US Robotics 56.6: +$40) Internet Ready
- **Diamond SVGA 2MB**
- Sound Blaster 16 PNP or Yamaha Sound (Internet Ready!)
- 180W Speakers
- TEAC 1.44MB 3.5" Floppy Drive
- Mid Tower Case with Power Supply
- Keytronics Keyboard for Windows 95
- Microsoft Mouse with Pad
- Free Microsoft Windows 95
- **Free CD Deluxe Pack**

Pentium II-333 (Intel 440 LX) ATX $1178
Pentium II-300 (Intel 440 LX) ATX.....1048
Pentium II-266 (Intel 440 LX) ATX.....928
Pentium II-233 (Intel 440 LX) ATX.....888
MMX-P233/512K (Intel Anchorage) ATX 838
MMX-P200/512K (Intel Anchorage) ATX 808
MMX-P233/512K (Intel Tucson) ATX 818
MMX-P200/512K (Intel Tucson) ATX 788
MMX-P233/512K (Intel Triton TX) 758
MMX-P200/512K (Intel Triton TX) 728
AMD K6-233/512K (Intel Triton TX).....718

Upgrade With System

- 17"/15" SVGA Monitor $255/145
- 30-Bit Color Flatbed Scanner.....88
- Microsoft Office Professional.....188

HI-TECH HOME *Multimedia Systems*

PENTIUM-166
BUSINESS LEASE
AVAILABLE

$598

- **16MB RAM** (32MB/64MB: +$20/$40)
- **1.2GB EIDE** (2.0GB/4.3GB: +$20/$30)
- **24X Max CD-ROM** (32X: Add $10)
- **33.6 Internal Fax Modem w/voice** (56.6 w/Voice: +$20) Internet Ready
- **1MB SVGA Card**
- PCI IDE with I/O
- Wavetable 3D Sound Card (Internet Ready!)
- 80W Speakers
- TEAC 1.44MB 3.5" Floppy Drive
- Mid Tower Case with Power Supply
- Keytronics Keyboard for Windows 95
- Free Mouse with Pad
- Free Microsoft Windows 95
- **Free CD Deluxe Pack**

MMX-P233/512K (Super Micro).....$688
MMX-P200/512K (Super Micro).....658
MMX-P233/512K (Asus SP97).....678
MMX-P200/512K (Asus SP97).....648
MMX-P233/512K (Intel Triton TX).....658
MMX-P200/512K (Intel Triton TX).....628
AMD K6-233/512K (Intel Triton TX).....618
AMD K6-200/512K (Intel Triton TX).....598
CYRIX MX-P233/512K (Intel Triton TX)..608
CYRIX MX-P200/512K (Intel Triton TX)..588
P5-166/256K (Intel Triton VX).....598

Upgrade With System

- 15"/14" SVGA Monitor $145/115
- 30-Bit Color Flatbed Scanner.....88
- Microsoft Office Professional.....188

Why do customers keep buying from HI-TECH USA? Simply because we deliver the best values.

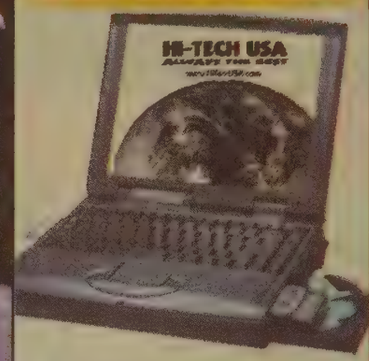
HI-TECH USA SUPER SALE

SAN FRANCISCO STORE OPEN ON SUNDAY 10AM TO 4PM

*BASIC SYSTEM: MOTHERBOARD & CPU, 1.44MB FDD, CASE WITH POWER SUPPLY, AND 104-KEY KEYBOARD.

	MOTHER-BOARD	MOTHER-BOARD WITH CPU	BASIC SYSTEM W/32MB RAM	BASIC SYSTEM W/64MB RAM
DUAL PENTIUM II-400 (SUPER MICRO BX CHIPSET) W/1CPU	$408	$1218	$1418	$1498
DUAL PENTIUM II-333 (ASUS P2L97DS) W/1CPU	358	848	1008	1078
PENTIUM II-400 (INTEL SEATTLE BX CHIPSET) ATX	218	1018	1218	1298
PENTIUM II-350 (INTEL SEATTLE BX CHIPSET) ATX	218	818	1018	1098
PENTIUM II-400 (SUPER MICRO BX CHIPSET) ATX	188	988	1188	1268
PENTIUM II-350 (SUPER MICRO BX CHIPSET) ATX	188	788	988	1068
PENTIUM II-333 (SUPER MICRO M/B) ATX	128	618	778	848
PENTIUM II-300 (SUPER MICRO M/B) ATX	128	488	648	718
PENTIUM II-266 (SUPER MICRO M/B) ATX	128	368	528	598
PENTIUM II-400 (ASUS P2B98 BX CHIPSET) ATX	188	988	1188	1268
PENTIUM II-350 (ASUS P2B98 BX CHIPSET) ATX	188	788	988	1068
PENTIUM II-333 (ASUS or INTEL ATLANTA M/B) ATX	144	628	788	858
PENTIUM II-300 (ASUS or INTEL ATLANTA M/B) ATX	144	498	658	728
PENTIUM II-266 (ASUS or INTEL ATLANTA M/B) ATX	144	378	538	608
PENTIUM II-233 (ASUS or INTEL ATLANTA M/B) ATX	144	338	498	568
PENTIUM II-400 (INTEL 440BX) ATX	138	948	1148	1228
PENTIUM II-333 (INTEL 440LX) ATX	104	588	748	818
PENTIUM II-300 (INTEL 440LX) ATX	104	468	628	698
PENTIUM II-266 (INTEL 440LX) ATX	104	348	508	578
PENTIUM II-233 (INTEL 440LX) ATX	104	298	458	528
PP-180C (INTEL VENUS M/B) ATX	84	218	378	448
MMX-P233/512K (INTEL ANCHORAGE M/B) ATX	114	248	408	478
MMX-P200/512K (INTEL ANCHORAGE M/B) ATX	114	218	378	448
MMX-P233/512K (INTEL TUCSON M/B) ATX	98	228	388	438
MMX-P200/512K (INTEL TUCSON M/B) ATX	98	198	358	408
MMX-P233/512K (SUPER MICRO M/B)	104	238	358	408
MMX-P200/512K (SUPER MICRO M/B)	104	208	328	378
MMX-P233/512K (ASUS SP 97) (ASUS VX97: +$20)	76	218	338	388
MMX-P200/512K (ASUS SP 97) (ASUS VX97: +$20)	76	188	308	358
MMX-P233/512K (INTEL TRITON TX)	68	198	318	368
MMX-P200/512K (INTEL TRITON TX)	68	168	288	338
AMD K6-P233/512K (INTEL TRITON TX)(K6-P266: +$80)	68	168	288	338
CYRIX MX-P233/512K MMX (INTEL TRITON TX)	68	158	278	328
CYRIX MX-P200/512K MMX (INTEL TRITON TX)	68	138	258	308
P5-166/256K (INTEL TRITON VX)	48	128	248	298

HI-TECH Extreme Notebooks



HOLDS UP TO 128MB OF RAM

- 32MB EDO RAM
- 2.1GB Hard Drive
- 16-Bit Stereo
- Modular 20X CD-ROM
- NiMH Battery
- 64-Bit PCI
- 2MB VRAM
- Infrared (FIR)
- Windows 95
- Carrying Case

Options: Port Replicator, Docking Station, Li-Ion Battery, Car adapter, Win NT, Linux 2.0, PCMCIA Fax/Modem or LAN Card.

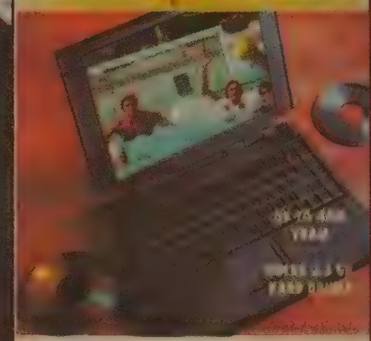
UPGRADE

- To 3.0GB / 4.0GB HDD .....Add $50 / 180
- To Li-Ion Battery.....Add $70

NOTEBOOK	MMX 200	MMX 233
12.1" TFT	$1458	$1528

Business Lease Available

HI-TECH Super Notebooks



UP TO 72MB EDO RAM ON 12.1"
TO 128MB EDO RAM ON 13.3" AND 14.1" LCD

- 32MB EDO RAM
- 2.1GB Hard Drive
- 2MB/4MB EDO VRAM
- Built-in 20X CD-ROM
- Windows 95
- Infrared (FIR)
- 512K Cache
- 64-bit Graphic Engine
- 16-Bit Stereo
- 3D Sound / Wavetable
- NiMH Battery
- Carrying Case

Options: Port Replicator, Li-Ion Battery, Car adapter, Win NT, PCMCIA Fax/Modem or LAN Card

UPGRADE

- To 3.0GB / 4.0GB HDD .....Add $50 / 180
- To Li-Ion Battery.....Add $70

NOTEBOOK	MMX 200	MMX 233
14.1" TFT	$2028	$2068
13.3" TFT	$1918	$1958

Business Lease Available

HI-TECH POWER MULTIMEDIA SYSTEM

- 400MHz Intel Pentium II Processor
- Super Micro Motherboard SBS w/Intel BX Chipset
- UW SCSI and Raid Port
- 128MB Memory
- 9.0GB Ultra Wide UW SCSI HDD
- USR 56K Fax/Modem
- 2X DVD ROM
- PDC AC-3 Digital Surround Sound
- Sound Blaster AWE 64 Value
- Matrox Millenium II 8MG AGP
- Yamaha M15 Speakers & Mouse
- ATX Full Tower w/300W PS
- MS Windows 95 Pre-installed
- 17"/15" Monitor ....+$255/145

Pentium II-400 $2948

BUSINESS LEASE: $104/MONTH

See Next Page for All of Our Upgrade Prices

HI-TECH DREAM MULTIMEDIA SYSTEM

- 233MHz Intel Pentium Processor w/MMX Technology
- 32MB Memory
- 512K Pipelined Cache
- 4.3GB Hard Drive
- 24X Max CD-ROM
- 33.6K Fax/Modem
- 16-Bit Sound Card
- Diamond Edge 3D 2MB VRAM
- 80 Watt Speakers & Mouse
- Mini Tower Case w/Power Supply
- MS Windows 95 Pre-installed
- 15"/14" Monitor ....+$145/115

MMX-233 $698

BUSINESS LEASE AVAILABLE

See Next Page for All of Our Upgrade Prices

HI-TECH VALUE MULTIMEDIA SYSTEM

- Cyrix 6X86 GX-PR 180 Processor
- 16MB System Memory
- 512K Pipelined Cache
- 1.2GB IDE Hard Drive
- 12X Max CD-ROM Drive
- 16 Bit 3D Sound
- 33.6K bps Fax/modem
- 1MB SVGA
- Mini Tower Case with Power Supply
- Keyboard for Windows 95
- Speakers and Mouse
- Microsoft Windows 95 Pre-installed
- 15"/14" Monitor ....+$145/115

180MHZ $488

200MHZ $528

See Next Page for All of Our Upgrade Prices

MONTHLY SPECIAL

IMAGER 730 SCANNER
30-BIT COLOR FLATBED
$88

2X DVD ROM
WITH DECODER CARD
$248

VIDEOCONFERENCE KIT
INCLUDES CAMERA AND CAPTURE CARD
$128

IIYAMA Monitor
9017E
$568

BERKELEY

Phone (510) 843-8888
2318 Shattuck Avenue, Berkeley
Fax (510) 843-8868

SAN FRANCISCO

Phone (415) 753-8888
850 Tarraval Street, San Francisco
Fax (415) 753-8849

SAN MATEO

Phone (650) 401-8888
111 E. 5th Avenue, San Mateo
Fax (650) 401-8818

SUNNYVALE

Phone (408) 732-8888
720 East El Camino Real, Sunnyvale
Fax (408) 732-8388

MILPITAS

Phone (408) 262-8888
1550 & 1582 Centre Pointe Dr., Milpitas
Fax (408) 262-8272

SALES HOURS: Mon-Fri: 9am-6pm, (8:30am-6pm Milpitas), Sat: 10am-4pm, Sun: 10am-4pm (SF Only)
SERVICE HOURS: Mon-Fri: 9am-5:30pm, Sat: 10am-3:30pm

DISCOVER · ATM CARD · VISA · MasterCard

HI-TECH USA ALWAYS

www.HiTech-USA.com

TERMS AND CONDITIONS

1. One year parts and labor warranty on systems.
2. Knowledgeable technical support engineers in service.
3. Prices and availability subject to change w/o notice.
4. Shipping, insurance and COD charges are extra and non-refundable. Prices reflect cash discounts.
5. Return shipping must be insured, prepaid and bearing an RMA# on the shipping label.
6. Defective items replaced or repaired at our discretion.
7. No responsible for typos.
8. All returns subject to 15% restocking fee and cover only HI-Tech USA brand computers; excludes peripherals, software and notebook computers. No refunds after 30 days.
9. Superior reputation for service, quality and value.
10. Purchase orders are welcomed and subject to approval.

HI-TECH USA

ALWAYS THE BEST

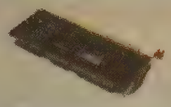
www.HiTech-USA.com

(408) 262-8688 ..... Milpitas
(408) 732-8688 ..... Sunnyvale
(650) 401-8688 ..... San Mateo
(415) 753-6888 ..... San Francisco
(510) 843-8688 ..... Berkeley

CASE W/ POWER SUPPLY

230W / 250W / 300W Power Supply ..... $17 / 19 / 32
235W / 250W ATX Power Supply ..... 38 / 40
Mini Tower Case w/200W Power Supply 19
Desktop AT Case w/200W Power Supply 29
Medium Tower Case w/230W Power Supply 32
Full Tower Case w/250W Power Supply 46
ATX Case w/Power Supply (Mid / Full) ..... 53 / 72
Full ATX Case w/300W Power Supply 98

CONTROLLERS



IDE 2FD/2HD with 2S/1P/1G $11

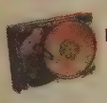
adaptec

2842 VLB (SCSI) 58
2940 PCI (SCSI) 129
2940AU PCI (SCSI) 148
2940UW PCI (SCSI) 164

DATA TECHNOLOGY CORPORATION

DTC 2280E ISA with 16550 UART Chip $19
DTC3510 SCSI / ISA 48

HARD / FLOPPY DRIVES



Quantum™ Maxtor® Seagate

WESTERN DIGITAL

IDE 1.2GB / 2.0GB ..... $110 / 119
IDE 2.5GB / 4.3GB ..... 129 / 148
IDE 6.4GB / 8.4GB ..... 198 / 268
SCSI 1.0GB / 2.0GB ..... 158 / 188
SCSI 4.0GB / 6.4GB ..... 258 / 338
SCSI 9.0GB 658
FUJITSU IDE 2.5GB / 3.2GB ..... 138 / 148
JTS IDE 1.2GB 110
MAXTOR IDE 2.5GB / 3.2GB ..... 138 / 148
MAXTOR IDE 6.4GB 208
MAXTOR IDE 8.4GB 274
MICROPOLIS SCSI 9.1GB (SCSI III) 718

QUANTUM
IDE 3.1GB / 3.8GB ..... 146 / 158
IDE 6.4GB 170
SCSI 2.0GB / 4.3GB ..... 188 / 258
SCSI 6.4GB 338
SCSI 9.1GB (SCSI) 658

SAMSUNG
IDE 2.0GB / 4.3GB ..... 119 / 148

SEAGATE
IDE 2.5GB / 3.2GB ..... 130 / 144

WESTERN DIGITAL
IDE 2.0GB / 2.5GB ..... 128 / 133
IDE 3.2GB 145
IDE 4.3GB / 6.4GB ..... 168 / 218

FLOPPY DRIVES
Mitsumi / Teac 1.44 Floppy Drive ..... 17 / 19
Teac 1.2 Floppy Drive 30

MOUSE

3-Button Mouse Microsoft Compatible $5
Net Mouse PS2 or Serial 9

LOGITECH

First Mouse (Serial-2 Button) 9
Mouseman Serial / PS2 (OEM) ..... 14 / 15

Microsoft

2 Button Serial / PS2 (w/System) ..... $20 / 21
Intelli Serial / PS2 (w/System) 23

KEYBOARDS

104-Key Keyboard for Windows 95 ..... $9

FOCUS
FK2001 / 6200W / 7200W ..... 22 / 18 / 23
FK8200 / 9200 ..... 34 / 38
Keytronics 104-Key for Windows 95 15
Lite-on SK-6000 / SK-6000T ..... 34 / 49
Mitsumi 104-Key for Windows 95 10
Maxiswitch Nova for Windows 95 15
Maxiswitch Nova PS/2 15
Microsoft Natural Key (w/System) 34

MEMORY & CPU

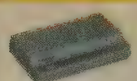
256K / 512K Cache Memory ..... 4 / 10

SIMM
1MB (1x3) (30 Pin) 3
4MB (4x3) (30 Pin) 9
4MB (4x9) (30 Pin) 15
4MB (1x32) (72-Pin) 8
8MB (2x32) (72-Pin) 12
16MB (4x32) (72-Pin) 22
32MB (8x32) 72-Pin) 43
4MB (1x32) (EDO) 8
8MB (2x32) (EDO) 12
16MB (4x32) (EDO) 20
32MB (8x32) (EDO) 40
4MB (1x36) (Parity) 13
8MB (2x36) (Parity) 23
16MB (4x36) (Parity) 30
32MB (8x36) (Parity) 58

DIMM
16MB (2x64) (66 / 100 MHZ) ..... 26 / 28
32MB (4x64) (66 / 100 MHZ) ..... 44 / 76
64MB (8x64) (66 / 100 MHZ) ..... 94 / 148
128MB (16x64) (66 / 100 MHZ) ..... 188 / 288

CPU
AMD 486DX4-100 34
AMD K6-200 / K6-233 ..... 84 / 94
AMD K6-266 / K6-300 ..... 174 / 264
Cyrix MX-P166 58
Cyrix MX-P200 66
Cyrix MX-P233 84
Cyrix MX-P266 164
Intel P5-90 / P5-100 ..... 48 / 68
Intel P5-166 88
Intel Pentium Pro-180 / with Fan ..... 138 / 148
Intel MMX-200 / 233 ..... 108 / 134
Intel Pentium II-233 / 266 ..... 204 / 244
Intel Pentium II-300 / 333 ..... 364 / 494
Intel Pentium II-350 / 400 ..... 598 / 798

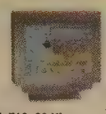
MODEMS & FAXES



Fax Modem 33.6 Int (Windows Only) $25
Fax Modem 33.6 Int 28
Fax Modem 33.6 with Voice Int 29
Fax Modem 33.6 Ext 55
Fax Modem 56.6 with Voice Int (Windows Only) 44
Fax Modem 56.6 with Voice Int 52
PCMCIA Fax Modem 33.6 Data w/V.34 54
PCMCIA Fax Modem 56.6 80
SUPRA 56.6 Fax Modem Int 68

US ROBOTICS
Sportster 33.6 Data Fax Modem Int (Retail) 68
Sportster 33.6 Data Fax modem w/Voice Int (Bulk) 82
Sportster 33.6 Data Fax Modem w/Voice Int (Retail) 88
Sportster 56.6 Internal w/o Voice (Bulk) 84
Sportster 56.6 Internal w/Voice (Bulk) 94
Sportster 56.6 Internal w/Voice (Retail) 134
Sportster 56.6 External w/Voice (Retail) 178

MONITORS *



14" SVGA 1024*768 .28 NI $115
15" SVGA 1024*768 .28 145
17" SVGA 1280*1024 .28 255

CTX

14" Super VGA 1024*768 .28 NI $158
15" Super VGA 1024*768 .28 178
17" Super VGA 1280*1024 .28 (VL700) 328
17" Super VGA 1600*1280 .26 (VL710) 368

IIYama (IDEK)

MF-8515G 15" 1280*1024 .28 ..... $248
MF-8617E 17" 1600*1200 .26 485
MF-9017E 17" 1600*1200 .26 565
MF-9221 21" 1600*1200 .30 1155
MF-8721 21" 1800*1440 .27 1155

mpression

3+ 14" 1024*768 .28 NI $134
5+ 15" 1280*1024 .28 NI 178
7+ 17" 1280*1024 .28 Ni 324
17" Vienna Pro 474

MAG INNOVISION

DJ530 15" 1280*1024 .28 ..... $218
500T 15" 1280*1024 .25 284
DX15T 15" .25 Trinitron OSD Win 95 290
DJ700 17" .26 1280*1024 408
DX700T 17" .25 Trinitron OSD Win 95 498

NANAO

FX-B5 15" .28 / FX-C5 17" .28 ..... 464 / 654
FX-C6 17" .26 / TX-C7 17" .25 ..... 734 / 808
TX-D7S 20" .25 / FX-E7 21" .28 ..... 1518 / 1528

NEC

A500 / E500 / M500 ..... 257 / 298 / 354
A700 / E700 / M700 ..... 458 / 558 / 558
E1100 21" .28 1078

NOKIA

449XA 15" / 447Z 17" ..... $314 / 444

SONY

100ES / 100GS 15" ..... $278 / 338
200ES / 200GS 17" ..... 518 / 588
200PS 17" / 400PS 19" ..... 718 / 918
205EZT 20" / 500PS 21" ..... 1128 / 1378

ViewSonic®

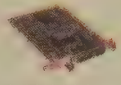
E641 14" 1024*768 .28 ..... $164
E655 15" 1024*768 .28 224
P655 15" 1280*1024 .28 278
15GA 15" 1280*1024 .27 w/Speakers 304
EA771 17" 1280*1024 .28 w/Speakers 448
G771 17" 1280*1024 .28 396
17GA 17" 1280*1024 .27 w/Speakers 498
G773 17" 1280*1024 .25 428
PT771 17" 1600*1200 .25 578
PT775 17" 1600*1200 .25 616
G790 19" 1600*1200 .26 748
G810 21" 1600*1200 .25 949
P810 21" 1600*1200 1066
PT 813 21" 1600*1200 SonicTron 1236
P815 21" 1800*1440 .25 1156
29GA 29" .75 1948
VPA138 938
VPA150 1318

* Monitor Viewable size may be smaller than advertised size

MULTIMEDIA

2X DVD Rom with Decoder Card $248
TV Card 68
Videoconference Kit – Camera and Capture Card 128
16-Bit Sound Card 12
Altec Lansing Speakers ACS 43 / ACS 51 ..... 39 / 54
Altec Lansing Speakers ACS 150 / ACS 500 ..... 85 / 248
CD Writer Yamaha CDR-4260TIPC Rewritable SCSI Int 538
CD Writer Yamaha CDR-4001TIPC Rewritable IDE Int 538
Creative DVD ROM with Decoder Card 268
Creative Sound Blaster 16 SCSI II 48
Creative Sound Blaster 16 PNP 30
Creative Sound Blaster 32 PNP 55
Creative Sound Blaster AWE 64 Value (Bulk) 59
Creative Sound Blaster AWE 64 Value (Retail) 82
Creative Sound Blaster AWE 64 Gold (Bulk) 128
Creative Sound Blaster AWE 64 Gold (Retail) 158
CD-ROM 4X IDE / 6X IDE ..... 18 / 28
CD-ROM 12X IDE / 16X IDE ..... 40 / 47
CD-ROM 20X IDE / 24X IDE ..... 48 / 49
CD-ROM 32X / 36X IDE ..... 58 / 78
Mitsumi 6X 6-Speed / 16X 16-Speed IDE ..... 32 / 51
Mitsumi 24X 24-Speed IDE 54
Mitsumi 32X 32-Speed IDE 64
NEC 16-Speed SCSI / 24-Speed SCSI ..... 74 / 84
Parsonic 8X SCSI 48
TEAC 24X 24-Speed IDE 58
TEAC 32X 32-Speed IDE 68
TEAC 16X 16-Speed SCSI 72
Toshiba 24X 24-Speed IDE 59
Toshiba 32X 32-Speed IDE 69
Toshiba 12X / 15X SCSI ..... 58 / 68
Toshiba 32X 32-Speed SCSI 92
Speakers 80W 10
Speakers 180W / 300W ..... 22 / 36
Yamaha Speakers M7 / M15 ..... 36 / 58
Yamaha Speakers M25 / M35 / M45 ..... 98 / 128 / 148

NETWORKS



16 BIT Ethernet Card ISA (Combo) $12
32 BIT PCI Ethernet Card (Combo) 14
PCMCIA Ethernet Card (Combo) 54

3Com

3C509 ELINK III TP $37
3C509 ELINK III Combo 53
3C900 PCI TP 59
3C900 PCI Combo 74
3C905 TX PCI 10 / 100 58

Hubs and Repeaters

Ethernet Hub 5-Port / 9-Port ..... $35 / 43
Ethernet Hub 17-Port 79

Intel

EtherExpress Pro 10 / 100 TX PCI $49

PRINTERS

NEC 150C Color Deskjet $128
NEC 750C Color Deskjet 178
NEC 660i Laser Printer 248
NEC 860 Laser Printer 378
NEC 1260 Laser Printer SuperScript 648

SCANNERS

Imager 730 Flatbed 30-Bit Color 9600 300x600dpi $88
Umax Astra 610P / 600S ..... 128 / 148
Umax Astra 1220P 198
Umax Astra 1200S Photo Deluxe Win 234

SOFTWARE

Microsoft Super Home Bundle (w/system) $75
Microsoft Office Professional OEM CD Version (w/System) 188
Microsoft Windows NT 4.0 Server
5 Clients (with/System) / 10 Clients (with/System) ..... BEST
Microsoft Windows NT 4.0 Workstation (with Sys) ..... BEST

TAPE BACKUP *

COLORADO MEMORY SYSTEMS

T-3000T 3.2GB Int. w/tape 152
T-4000T 8.0GB SCSI Int w/tape 333
Tape for 800MB 10

IOMEGA
Jaz SCSI Drive 1.0GB Insider 268
Jaz SCSI Drive 1.0GB External 368
Jaz SCSI Drive Cartridge 93
Zip Drive 100MB IDE 84
Zip Drive 100MB External Parallel 135
Zip Drive 100MB External SCSI 108
Zip Drive 100MB Cartridge 15
NEC Zip Drive 100MB IDE 79

VGA CARDS

SVGA ISA w/1MB 28
Cirrus Logic PCI w/1MB 19
S3 Virge 3D w/2MB EDO 35
S3 Virge w/4MB AGP 64
Trident PCI w/1MB MPEG 21
Trident PCI w/2MB 27

ATi TECHNOLOGIES INC.

3D Xpression 2MB EDO 41
3D Xpression+ w/o TV 2MB 44
3D Xpression+ w/o TV 4MB 54
3D Xpression+ w/ TV 2MB 62
3D Xpression+ w/ TV 4MB 72
All In Wonder 4MB 126
Pro 2MB VRAM 48
Pro 4MB VRAM 58
ProTurbo w/TV 4MB SGRAM 72
ProTurbo w/TV 8MB SGRAM 94
TV Tuner 78
Xpert@Work 4MB AGP 78
Xpert@Work 4MB PCI 74
Xpert@Work 8MB AGP 99
Xpert@Work 8MB PCI 98
Xpert@Play 4MB AGP 92
Xpert@Play 4MB PCI 88
Xpert@Play 8MB AGP 115
Xpert@Play 8MB PCI 114

DIAMOND

2500 1MB / 2MB ..... $19 / 29
Edge 3D 2MB DRAM / VRAM ..... 29 / 36
Hercules 3D 2MB EDO 38
Hercules 128/Video 2MB EDO 48
Stealth 3D 2000 Pro PCI 2MB 46
Stealth 3D 2000 Pro PCI 4MB 58
Stealth 3D 3000 PCI 4MB (VRAM) 132
Stealth 3D 4000 AGP 4MB 68
Fire GL1000 Pro 4MB AGP 132
Fire GL1000 Pro 4MB PCI 113
Fire GL1000 Pro 8MB AGP 162
Fire GL1000 Pro 8MB PCI 143
Monster 3D 4MB 108
Viper V330 4MB AGP 98
Viper V330 4MB PCI 98

MATROX

Millennium II 4MB AGP (Bulk) 124
Millennium II 4MB PCI (Bulk) 124
Millennium II 4MB (Retail) 164
Millennium II 8MB AGP (Bulk) 168
Millennium II 8MB PCI (Bulk) 164
Millennium II 8MB (Retail) 228
Mystique 220 2MB (Bulk) 68
Mystique 220 4MB (Bulk) 78
Productiva G100 AGP 4MB / 8MB ..... 74 / 84
Rainbow Runner 138

Number 9

Revolution 4MB SGRAM AGP (Bulk) 168
Revolution 8MB SGRAM AGP (Bulk) 198
Revolution 8MG SGRAM AGP (Retail) 218

Intel, Intel Inside and Pentium are registered trademarks of the Intel Corporation. Microsoft is a registered trademark and Windows and the Windows logo are trademarks of Microsoft Corporation. All other trademarks, logos are property of their respective companies.

CORPORATE ORDER (888) 868-8778 FAX (408) 262-8772 SERVICE (408) 956-8285
QUOTE (408) 946-6886 EMAIL - HTUSA@SLIP.NET WWW.HITECH-USA.COM

ONE-STOP SOLUTION OF NETWORKING

UNIX/LINUX/NT SYSTEMS ON INTEL PLATFORM (Solaris/SCO/Linux/NT)

Corporate, Governments & Education PO's Welcome

HI-TECH PS1002

POWER SERVER

$3,678

BUSINESS LEASE $128/MONTH

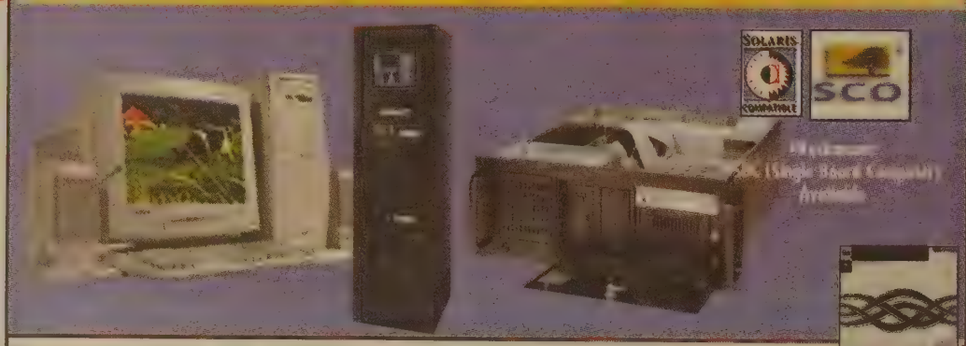
- Dual Pentium II/400MHz Motherboard W/Intel 440 BX chipset AGP
- Dual Pentium II/400MHz CPU
- 128MB DIMM SDRAM
- Ultra Wide SCSI Controller (80 MB/S)
- Teac 1.44MB FDD
- 10/100MBPS PCI Ethernet Card
- 9GB ULTRA Wide SCSI HD
- 24X SCSI Int. CD-Rom
- Diamond 3D 2000 PCI w/2MB
- ATX Full Tower W/300W P/S
- Logitech PS/2 Mouse
- Keytronic Enhanced Keyboard

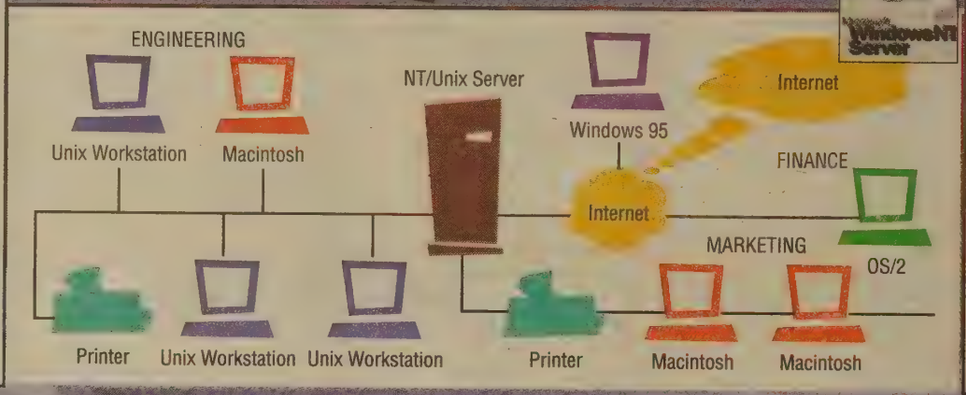
OPTIONS:

350MHZ	$3208	$123/Mo.
333MHZ	$2958	$104/Mo.
300MHZ	$2658	$94/Mo.
266MHZ	$2378	$84/Mo.

Ask for 19" Rackmount Case

CUSTOM CONFIGURATION





HI-TECH RS2002

RAID SERVER

$5,998

BUSINESS LEASE $210/MONTH

- Dual Pentium II/400MHz Motherboard W/Intel BX chipset AGP, w/RAID Support
- Dual Pentium II/400MHz CPU
- 256MB DIMM SDRAM
- Adaptec AAA-133RAID 3 Channel (Level 0 - Level 5)
- Teac 1.44MB FDD
- 10/100MBPS PCI Ethernet Card
- 20GB (5x4.3GB) ULTRA Wide SCSI HD
- 24X SCSI Int. CD-Rom
- Diamond 3D 2000 PCI w/2MB
- ATX Server Tower W/Dual 300W Hot Swapped Power Supply
- Logitech PS/2 Mouse
- Keytronic Enhanced Keyboard

OPTIONS:

350MHZ	$5528	$194/Mo.
333MHZ	$5278	$185/Mo.
300MHZ	$4978	$175/Mo.

HI-TECH LUNS201 WORKSTATION

$818 BUSINESS LEASE $29/MONTH

- Intel Triton M/B w/512K cache
- Pentium 233 MHz, MMX CPU
- 64MB EDO RAM, 60ns
- Teac 1.44MB FDD
- 10/100MBPS PCI Ethernet Card
- Matrox Millenium II w/4MB
- 4.3GB Ultra EIDE Internal HDD
- 24X EIDE Internal CD-Rom
- Mid Tower Case w/Power Supply
- Keytronics Enhanced Keyboard
- Logitech PS/2 Mouse (3 buttons)

OPTIONS:

Solaris Desktop V.2.6	Add $315
SCO Desktop V5.0.4	Add $615
MS NT Workstation / WIN 95	Add $168 / 95

- Provides local and remote users with fast, simultaneous access to all network resources
- Offers a wide variety of connectivity options
- Provides outstanding management and administration capabilities
- Use Server of NT/Solaris/SCO/Linux to make a flexibility Network Access Services (NAS)
- Provides relative software solution for variety of networking packages.

NETWORKING SOLUTION 1

$7,578

BUSINESS LEASE $265/MONTH

INCLUDING

- 1x Hi-Tech PS1002 Server
- 4x Hi-Tech LUNS201 Workstations
- APC UPS 1400 w/950W, 6 outlet
- 5 Port 10Base-T HUB

OPTIONS:

MS Small Business Server w/5 User	Add $1295
Linux OS	Add $50 each
NT Server w/10 User	Add $780
Solaris Server 2.6 w/5 User	Add $550
SCO OpenServer Enterprise w/5 User	Add $1015
4x MS Office Pro 97	Add 4x $188

Ask for Novell NetWare

NETWORKING SOLUTION 2

$14,018

BUSINESS LEASE $489/MONTH

INCLUDING

- 1x Hi-Tech RS2002 Server
- 9x Hi-Tech LUNS201 Workstations
- APC UPS 1400 w/950W, 6 outlet
- 12 Port 10Base-T HUB

OPTIONS:

MS Small Business Server w/25 User	Add $2295
Linux OS	Add $50 each
NT Server w/10 User	Add $780
Solaris Server 2.6 w/Unlimited User	Add $1235
SCO OpenServer Enterprise w/16 User	Add $1995

Ask for Novell NetWare

• 5 YEARS LABOR AND 1 YEAR PARTS WARRANTY • LIFETIME FREE TECHNICAL SUPPORT • 24 HOUR RESPONSE FOR TECHNICAL SUPPORT

BERKELEY	SAN FRANCISCO	SAN MATEO	SUNNYVALE	MILPITAS
Phone (510) 849-8888 2310 Shattuck Avenue, Berkeley Fax (510) 843-9868	Phone (415) 753-8888 850 Taraval Street, San Francisco Fax (415) 753-8848	Phone (650) 401-9888 111 E. 5th Avenue, San Mateo Fax (650) 401-9818	Phone (408) 732-8888 730 East El Camino Real, Sunnyvale Fax (408) 732-8868	Phone (408) 262-8888 1550 & 1562 Centre Pointe Dr., Milpitas Fax (408) 262-8772

DISCOVER ATM CARD VISA

HI-TECH USA ALWAYS TH

CORPORATE SALES & SERVICE HOURS: MONDAY - FRIDAY, 8AM TO 6PM PST

www.HiTech-USA.com

TERMS AND CONDITIONS

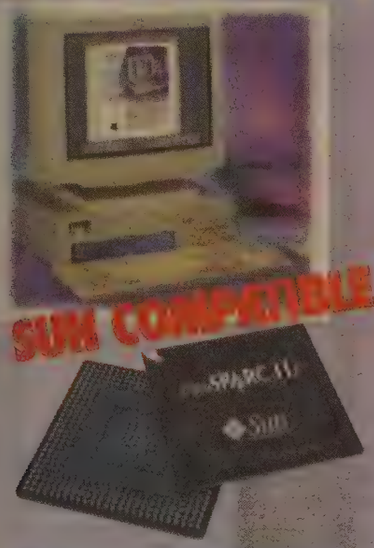
1. One year parts and labor warranty on systems.
2. Knowledgeable technical support engineers in service.
3. Prices and availability subject to change w/o notice.
4. Shipping, insurance and COD charges are extra and non-refundable. Prices reflect cash discounts.
5. Return shipping must be insured, prepaid and bearing an RMA# on the shipping label.
6. Defective items replaced or repaired at our discretion.
7. No responsible for typos.
8. All returns subject to 15% restocking fee and cover only Hi-Tech USA brand computers, excludes peripherals, software and notebook computers. No refunds after 30 days.
9. Superior reputation for service, quality and value.
10. Purchase orders are welcomed and subject to approval.

Solaris is a trademark of Sun Microsystems, Inc. SPARC is a trademark of SPARC International. All other trademarks are property of their respective owners.

HI-TECH USA
ALWAYS THE BEST

(888) 868-8778 CORP. ORDER
(408) 946-6886 QUOTE
(408) 262-8772 FAX WWW.HITECH-USA.COM

SPARCengine Ultra AXi PCI Systems



SPARC SOLARIS TECHNOLOGY WITH STANDARD PC COMPONENTS AT BEST VALUE

ASKING FOR THE PRICE OF MOTHERBOARD/CPU/MEMORY AND MORE

UltraSPARC-IIi is a highly-integrated, PCI-based, 64-bit SPARC V9 superscalar processor and is available as both a single chip and module. At 300 MHz with 512Kbytes external cache, the **UltraSPARC-IIi** processor-based module provides a SPECint95 of 12.1 and SPECfp95 of 12.9. The **UltraSPARC-IIi** processor supports 4/6 PCI devices at up to 66 MHz and an optional Advanced PCI Bridge is available to increase connectivity and support demand for PCI I/O bandwidth for up to eight devices at 33 MHz. The **UltraSPARC-IIi** processor provides optimum I/O, memory and compute performance for typical uniprocessor systems. This means a balanced price/performance solution that delivers the power and features needed by high-end applications, such as optimized power utilization, supporting manufacturability, and ease-of-design.

HI-TECH WIN500AX
AXi PCI SERVER
$3,998
BUSINESS LEASE $139/MONTH
- Sun SPARCengine Ultra AXi w/ 270MHz
- 64MB EDO DIMM
- 1.44 MB Floppy Disk Drive
- Symbios Ultra wide SCSI Controller
- 4.3GB Ultra Wide SCSI Int. Hard Drive
- 24X SCSI Internal CD-Rom Drive
- ATI PCI Video Card w/4MB
- Built-in 10/100 MHz Ethernet
- 2 Serial, 1 Parallel Port
- PS/2 Mouse
- Type 5 Enhanced Keyboard
- Solaris 2.6 Server (pre-loaded)

ASK FOR THE RACKMOUNT CASE

HI-TECH WIN1000AX
AXi PCI SERVER
$4,218
BUSINESS LEASE $148/MONTH
- Sun SPARCengine Ultra AXi w/ 300MHz
- 64MB EDO DIMM
- 1.44 MB Floppy Disk Drive
- Symbios Ultra wide SCSI Controller
- 4.3GB Ultra Wide SCSI Int. Hard Drive
- 24X SCSI Internal CD-Rom Drive
- ATI PCI Video Card w/4MB
- Built-in 10/100 MHz Ethernet
- 2 Serial, 1 Parallel Port
- PS/2 Mouse
- Type 5 Enhanced Keyboard
- Solaris 2.6 Server (pre-loaded)

ASK FOR THE RACKMOUNT CASE

HI-TECH UX20300
ULTRA SPARC II SERVER
$14,298
BUSINESS LEASE $501/MONTH
- System Mainboard w/Case & PS
- Ultra SPARC II 300 MHz CPU w/2MB Cache
- 256MB RAM
- GX3 1MB VRAM
- 4.3GB Ultra Wide SCSI Int. Hard Drive
- 1.44 MB Floppy Disk Drive
- Fast SCSI Internal CD-Rom
- Type 5 Enhanced Keyboard
- Mechanical Mouse
- Built-in 10Base-T Ethernet
- Solaris 2.6 Server (pre-loaded)

OPTIONS
UltraSPARC II w/ 2x300 MHz.....$19,598
UltraSPARC I w/ 167 MHz.....$7,988

HI-TECH RMS20300
RACKMOUNT SERVER
$15,688
BUSINESS LEASE $550/MONTH
- Sun Ultra SPARC II / 300 MHZ
- Ultra SPARC II 300 MHz CPU w/1MB Cache
- 256MB RAM
- GX3 1MB VRAM
- 4.3GB Ultra Wide SCSI Int. Hard Drive
- 1.44 MB Floppy Disk Drive
- Fast SCSI Internal CD-Rom
- Type 5 Enhanced Keyboard
- Mechanical Mouse
- Built-in 10Base-T Ethernet
- 19" Rackmount Chassis
- Solaris 2.6 Server (pre-loaded)

ASK FOR THE OTHER MODELS

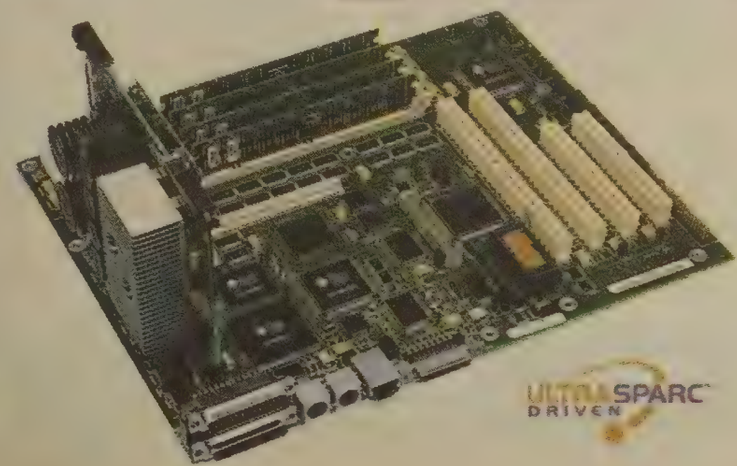
- 5 YEARS LABOR AND 1 YEAR PARTS WARRANTY
- LIFETIME FREE TECHNICAL SUPPORT
- 24 HOUR RESPONSE FOR TECHNICAL SUPPORT

CORPORATE SALES & SERVICE HOURS:
MONDAY - FRIDAY, 8AM TO 6PM PST

CORPORATE, GOVERNMENT, AND EDUCATION ORDERS WELCOME. LEASING & FINANCING AVAILABLE.

SOLARIS COMPATIBLE | SPARC Compliant SCD | SPARC International

RESELLERS WELCOME



BEST PRICE, BEST QUALITY, BEST SERVICE GUARANTEED!

Lifetime Labor Warranty on All Computers!

ACME P2-LX INTERNET PRO

Intel AL440LX Motherboard with sound
Intel Pentium® II Processor with fan
512K PB Cache, 32MB SDRAM
Diamond 3D 4000 4MB Video, AGP
Teac 1.44MB FDD
Maxtor 2.1GB U-DMA HDD
32X Toshiba CD ROM
56K Zoltrix Fax/Modem
60W speakers
Ps/2 keyboard & mouse
ATX Mid Tower w/235W power supply

Pentium® II-233MHz.....$898
Pentium® II-266MHz.....$949
Pentium® II-300MHz.....$1069
Pentium® II-333MHz.....$1189

AGP MULTIMEDIA 98

VIA 300 Motherboard with AGP
Diamond AGP 2MB Graphic card
Mitsumi 24X CD ROM
Intel Pentium, AMD K6 or Cyrix Processor
Cooling fan for CPU
16MB EDO RAM
2.1GB Ultra DMA33 Hard Drive
1.44MB Teac Floppy Drive
Deluxe 833 Mid Tower
Mitsumi 104 Keyboard
ESS 3D Sound Card
60w Amplified Speaker
Free Mouse & Pad
Free CD games

MMX200/233.....$619/$650
Cyrix MX-200 .....$593
Cyrix MX-233.....$609
AMD K6 233/266 $626/$669
AMD K6 166/200 ....$616/$639

ACME BX-400 BASIC UPGRADE

Acme BX-400 Basic Upgrade
SuperMicro P6SBA Motherboard
440BX chipset, 100MHz Bus
Intel Pentium II Processor
CPU cooling fan
AMI BIOS, 512K Cache
Teac 1.44MB FDD
EIDE+Fast I/O (16550 UART)
ATX Deluxe Mid Tower, 235W UL power

Pentium® II 233MHz $499
Pentium® II 266MHz $555
Pentium® II 300MHz $669
Pentium® II 333MHz $809
Pentium® II 350MHz $939
Pentium® II 400MHz $1149

CUSTOMER DESIGNED SYSTEMS & NETWORKING WELCOME!

Office AGP CAD Expert
Abit LX6 MotherBoard
440LX chip, 512K P-Cache
ATI Xpert@Work 4MB AGP Video
Intel Pentium® II Processor with fan
32MB SDRAM DIMM
4.3GB Ultra DMA33 Hard Drive 9ms
Teac 1.44MB FDD
32X CD ROM
ATX Delux Mid Tower case 235W
Keytronic PS/2 104 Keyboard
Microsoft PS/2 mouse

Pentium® II 233 MMX.....$858
Pentium® II 266 MMX.....$908
Pentium® II 300 MMX....$1028
Pentium® II 333 MMX....$1148

P-II SCSI NETWORK SERVER

Super Micro P6SBS 440BX AGP Motherboard
Intel Pentium® II CPU 512K with fan
24X CD ROM Mitsumi
Teac 1.44MB FDD
PC100 64MB SDRAM
Diamond Stealth 3D Pro 2MB
Adaptec Dual channel UW SCSI
4.5GB Ultra Wide SCSI Hard disk, 7ms
Intel 10/100M Ethernet Pro
Enhanced 104 Keyboard
ATX Full Tower, 300W UL power
Total 3 cooling fans
Logitec MouseMan, 3 button

Pentium® II 300 512K....$1499
Pentium® II 333 512K....$1628
Pentium® II 350 512K....$1749
Pentium® II 400, 512K ..$1968

Market News • SPECIALS • Market News • SPECIALS • Market News • SPECIALS

1. **Find Out About Our Weekly Specials Save Big $$$$** www.acmemicro.com
2. **Pentium MMX Motherboard with AGP slot from Tyan** $99
3. **Super Micro P6SBA Pentium II 400 motherboards Box with LanDesk** $149
4. **Intel Approved PC100 64/128MB SDRAM, Samsung original DIMM** $130/$299
5. **ATI Xpert@Work 4MB VGA (PCI or AGP)** $70

Brand Name Components at GREAT PRICES!

ABIT
Abit AX5 TX 512k, MMX, K6-233.....$89
Abit TX5 TX 512K, Pentium® MMX, K6.....$89
Abit BX6 Pentium® II 400, ATX.....$169

ASUS
Asus TXP4, AT, Pentium® 512K.....$109
Asus TXP4X, ATX, Pentium® 512K.....$112
Asus P2B98 ATX, 440BX,AGP, P-II 400.....$186
Asus P2L97-S ATX, 440LX, AGP, UW SCSI $219

INTEL
Intel Seattle SE440BXIA (P-II 400) + AUDIO (boxed).....$198
N440BX, Dual Pentium® II 400,SCSI,LAN,AUDIO.....$598
PR440FX Dual Pentium™ Pro.....$499

Super Micro (Intel Chipset)
P6DBS Dual Pentium® II 400 +Dual UW SCSI.....$392
P6SLA ATX, AGP, 440LX, DIMM.....$111
P6SBS ATX Pentium® II 400 with Dual UW SCSI.....$279
P5MMS98 MMX,K6-233, 512K, 430TX.....$99
P5MMA98 ATX, MMX, K6-233, 512K, 430TX.....$109

TYAN
Tsunami S1846S Pentium® II 400.....$168
Tiger 100 S1832DL ATX, BX Dual Pentium® II 400.....$260
New Titan-turbo 2, S1571/S1573, 512k, 233MMX, K6.....$89/92
Trinity S1592S Pentium® MMX with AGP.....$99

VIDEO DISPLAY

ATI Graphic
ATI All-In-Wonder Pro 4MB-- TV Tuner, PCI/AGP.....$198/213
XPERT@WORK 4MB PCI/AGP $70
Xpert@play 4MB PCI/AGP.....$89

DIAMOND
Stealth 3D 4000 4M SGRAM AGP.....$62
3D 2000 Pro 4MB.....$59
Fire GL1000 Pro PCI or AGP 8MB.....$169
Viper S330 4MB AGP.....$115

MATROX
Mystique220 4MB SGRAM.....$99
Millennium II 4MB/8MB AGP.....$133/209

ADAPTEC SCSI
AAA-131 RAID5 UW SCSI box.....$478
2940UW Ultra Wide SCSI kit.....$185
1522 SCSI II.....$89

NCR SCSI
875 Ultra Wide SCSI.....$99
810 Fast SCSI 2.....$49

CD & DVD
Mitsumi CR-2600TE IDE CD Writer.....$319
32X Toshiba SCSI CD ROMS93
32X Mitsumi IDE CD ROM.....$62
ESS 3D Sound card.....$15
420W Amplified Subwoofer speaker.....$42

Creative Labs
Sound Blaster AWE 64 Gold(retail box).....$145
Sound Blaster AWE64 Value.....$65
Ensoniq PCI Sound.....$39

SOFTWARE (SOLD WITH SYSTEM ONLY)
MS Window 98 New Relese version.....$99
MS Window 95 New Relese version.....$78
MS Office 97 small business edition.....$89
MS Word 97.....$25
MS Window NT 4.0 Server 5 Clients.....$498
MS Window NT 4.0 Work Station.....$136

MODEM
Zoltrix 56K with voice, speakerphone, caller ID.....$53
Diamond Supra 56K V.90 PCI.....$66

US Robotics
V.90 + X2 56K, internal.....$119
Sportster 33.6K , Int., #840.....$69
Sportster 56K V.90 + X2, external.....$162

BRAND NEW DRIVE
2.1/4.3/6.4/7.1/8.4GB U-DMA33 Maxtor
$125/157/212/275/295
4.5/9.1GB Ultra Wide SCSI, IBM 7ms.....$388/689
1.2/1.44 MB Teac Floppy Drive.....$43/$23
Iomega ZIP 100MB IDE/SCSI Internal drive.....$81/116
100MB ZIP disk.....$11

All Monitors with 3 years warranty !
Ilyama Vision Master (IDEK)
MT-9017E, 1600x1200@74Hz 17".25 Diamondtron, "1997 product of the year" PC Magazine.....$546
S-901GT, 1600x1200@80Hz, .22dp, 19".....$755
MT-9221, 1800x1440@74Hz, .28dp Diamondtron, 21".....$1099
LP-1014a 15" LCD, 1024*768@75Hz. 10Lbs.....$1199

MAG/PRINCETON
E090, 19" .26dp 1600*1200.....$736
E075, 17" 1600x1200 .26dp.....$480

VIEWSONIC
G771 17" .28dp.....$429
V29GA 29" 1280*1024.....$1840

CASE
Relisys 17" 1600x1200 .26dp, OSD.....$298
Relisys DeluxScan 15" .28dp, OSD.....$178

CASE & POWER SUPPLY
Supermicro 750A Full tower server with 300W power.....$175
Enlight Medium Tower, 6680 250W, 2 fan.....$63
230W Power supply AT/ATX.....$21/$39
300W Power supply AT/ATX.....$39/$61

many more servers & cases in demo room
Networking - Certified dealer for 3COM, Intel and Cisco Network products.

NETWORKING - CERTIFIED DEALER FOR 3COM, INTEL AND CISCO NETWORK PRODUCTS.

We do Networking design, installation & office automation.

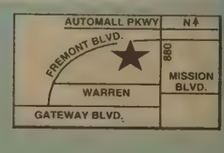
3Com 3C900 Combo PCI.....$85
3Com 3C905B TX 10/100MB PCI.....$65
Intel EtherExpress Pro/100+ PCI.....$53
3COM Office Connect Hub 8/TPO 8 ports (10MBPS).....$91
3COM Office Connect Hub TP16C 16 ports (10MBPS).....$235
3COM Office Connect Hub TP800 8 ports (100MBPS).....$379
Intel 8-port Fast Hub (100MBPS).....$379
3COM, Intel, CISCO Switch & Router.....$CALL
RJ45 15" cable.....$5
Coaxel 25" cable.....$8

Prices and availability subject to change without notice. Prices reflect cash discounts.

ACME MICRO-SYSTEM INC.
Since 1990

46500 Fremont Blvd., #716 • Fremont, CA 94538
(510) 226-6778 • FAX (510) 226-6773
Internet http://www.acmemicro.com

VISA
M-F 9-6 / Sat. 12:30-5:30
sales@acmemicro.com



— THE BEST SOURCE FOR ALL YOUR COMPUTER NEEDS SINCE 1985 —

Networking and Internet/Intranet Services

ASCEND · IBM · Novell Certified NetWare Engineer · HEWLETT PACKARD · MICROSOFT WINDOWS NT READY TO RUN · 3Com

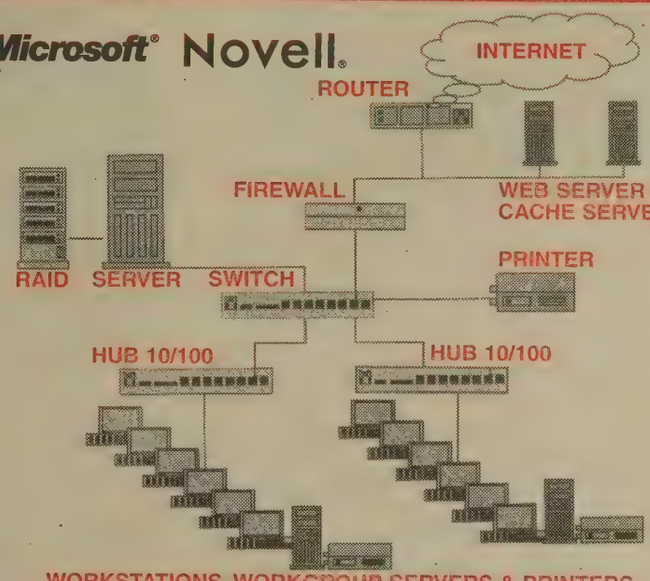
Microsoft® Novell®

YOUR NETWORKING SOLUTION PARTNER

SPECIALIST FOR CORPORATIONS, GOVERNMENT & EDUCATIONAL

- CERTIFICATED NETWORK ENGINEER
- 10 YEARS NETWORKING EXPERIENCE
- INTERNET SITE & WEB PAGE DESIGN
- E- COMMERCE
- DESIGN & SETUP NETWORKING SYSTEMS
- COMPLETE INSTALLED OF HARDWARE & SOFTWARE
- ON-SITE SERVICE & TRAINING
- EXPERT TROUBLE SHOOTING
- QUICK RESPONSE TIME
- FREE ON-SITE NETWORKING CONSULTATIONS
- * FREE DELIVERY

FOR MORE INFORMATION VISIT OUR WEB: WWW.CSNTECH.COM



WORKSTATIONS, WORKGROUP SERVERS & PRINTERS

PRECONFIGURED WINDOWS NT 4.0 SERVER

- ASUS PENTIUM® II SYSTEM BOARD
- 1 INTEL PENTIUM® II 300MHz CPU
- 128MB SDRAM 512K CACHE
- 9GB ULTRA-W SCSI HARD DRIVE
- ADAPTEC 3940 ULTRA-W SCSI CONTROLLER
- SEAGATE 8 GB FAST SCSI TAPE DRIVE
- TOSHIBA 24X CD-ROM DRIVE
- 1.44MB FLOPPY DRIVE
- DIAMOND STEALTH 3D 4MB SVGA CARD
- 15" MGC SVGA MONITOR
- INTEL 10/100TP ETHERNET CARD
- KEYTRNIC 104 KEYBOARD
- MS PS/2 MOUSE
- ATX FULL TOWER CASE W/350W PS
- MS WINDOWS **NT SERVER 4.0** (5 USERS)

FREE DELIVERY $3698

VALUE HOME COMPUTER MULTIMEDIA DELUXE SYSTEM

- TXPRO II MMX SYSTEM BOARD
- 512KB PIPELINE BURST CACHE
- 32MB EDO EXT TO 256KB
- FUJITSU 3.4GB ULTRA-DMA H/D
- 1.44 MB FLOPPY DRIVE
- TOSHIBA 24X CD-ROM DRIVE
- DIAMOND SUPRA 33.6KBPS FAX/MODEM
- BUILT-IN S3 VIRGE SVGA CARD
- ESS 3D STEREO SOUND CARD
- 104 KEYBOARD, MOUSE
- 100W STEREO SPEAKER
- MINI TOWER CASE
- MONITOR SOLD SEPARATELY
- INTERNET READY

PENTIUM® MMX 200MHz . . . $598
PENTIUM® MMX 233MHz $638
AMD K6 MMX 200 MHz $578
AMD K6 MMX 233 MHz $589

OFFICE SYSTEM SPECIAL PENTIUM® II SUPER MULTIMEDIA SYSTEM W/MMX, TECHNOLOGY & AGP

- INTEL 440LX CHIP PENTIUM® II SYSTEM
- 32MB SDRAM, 512K PIPELINE CACHE
- 1.44MB FLOPPY DRIVE
- 24X TOSHIBA CD-ROM DRIVE
- FUJITSU 3.4GB ULTRA-DMA HARD DRIVE
- DIAMOND SUPRA PCI 56K FAX/MODEM
- ESS 3D STEREO SOUND CARD
- AGP 4MB S3 ACCELERATED SVGA CARD
- ENHANCED 104 KEYBOARD
- PS/2 MOUSE
- USB/AGP/HIGH SPEED I/O PORTS
- 100W STEREO SPEAKER
- DELUXE MID TOWER CASE
- MONITOR SOLD SEPARATELY

PENTIUM® II 233MHz ... ... $ 789
PENTIUM® II 266MHz ... ... $ 838
PENTIUM® II 300MHz ... ... $ 989
PENTIUM® II 333MHz ... ... $ 1148

WEB MASTER SUPER PERFORMANCE PENTIUM® II PROFESSIONAL MULTIMEDIA SYSTEM

- INTEL ATLANTA 440LX SYSTEM BOARD
- 64MB SDRAM, 512K PIPELINE BURST CACHE
- WD 6.5 GB ULTRA-DMA HD
- TOSHIBA 32X CD-ROM
- 1.44 MB FLOPPY DRIVE
- US ROBOTICS 56K FAX/MODE W/VOICE
- ATI 3D EXPERT @WORK AGP 4MB SVGA CARD
- YAMAHA+ CRYSTAL 3D STEREO SYSTEM
- 260W STEREO SURROUND SOUND SPEAKERS
- ERGONOMIC ENHANCED KEYBOARD,
- PS/2 MOUSE
- USB/AGP/PSII HIGH SPEED I/O PORTS
- ATX DELUXE MID TOWER CASE
- MONITOR SOLD SEPARATELY

PENTIUM® II 233MHz ... ... $ 1298
PENTIUM® II 266MHz ... ... $ 1359
PENTIUM® II 300MHz ... ... $ 1528
PENTIUM® II 333MHz ... ... $ 1688
PENTIUM® II 400MHz ... ... $ 2098

MONTHLY SPECIAL

CD-ROM & SOUND CARD:
TOSHIBA 24X CD-ROM.....$63
TOSHIBA 32X CD-ROM.....$76
SOUND BLASTER 64 AWE $69
YAMAHA SOUND CARD $15
100/260W STEREO SPEAKER $19/39

SYSTEM BOARDS:
PENTIUM MMX TXPRO SYSTEM BOARD
* BUILT-IN ESS SOUND CARD
* S3 VIRGE PCI SVGA W/512K CACHE $79

PENTIUM II 440LX SYSTEM BOARD
* W/4MB AGP S3 3D SVGA CARD
* BUILT-IN ESS 3D SOUND CARD
* USB/AGP/PSII/SUPER IO PORTS.....$149
INTEL PENTIUM II ATLANTA 440LX.....$148

HARD DRIVES:
FUJITSU (ULTRA-DMA FAST IDE)
3.4GB/4.3/6.4GB.....$155/$178/$235
WD (ULTRA-DMA) 4.3GB/6.3GB .....$189/$275
IOMEGA 100MB ZIP DRIVE $85
1.44MB 3.5" FLOPPY DRIVE $18
ERGONOMIC KEYBOARD $29
LITE-ON 104 KEY WIN95 KEYBOARD $18

MONITORS:
15" DIGITAL N/I 1280X1024 .28 .....$169
17" SVGA 1280X1024 .28 .....$299
17" SVGA 1280X1024 .27 .....$335

FAX/MODEM W/VOICE
US ROBOTICS 56K $129
DIAMOND SUPRA PCI 56K.....$69

CPU & RAM CALL FOR TODAYS BEST PRICES
INTEL PENTIUM MMX CPU
200MHz/233MHz.....$122/158
INTEL PENTIUM II CPU
233/266/300/400MHz .....$229/$309/$439/$896
RAM 8MB/16MB/32MB EDO SIMM.....$16/$24/$48
32MB/64MB SDRAM .....$49/$109

SVGA CARDS
ATI XPERT@WORK 4MB PCI/AGP $135
ATI XPERT@PLAY 4MB PCI/AGP $158
3D 2000 W/4MB $62
MATROX MILLENIUM II 4/8MB.....$159/$219

VIDEO CONFERENCING KIT
C.U.C.U.S $159
COMS $109

SCANNER
3D COLOR SCANNER $138
ASER SCSI S 310S SCANNER $99

NETWORKING
NE2000 PCI ETHERNET CARD $18
3COM 3C905-TX.....$65
INTEL FAST ETHERNET 10/100 .....$54
5 PORT 10BASE-T HUB $48
8 PORT 10BASE-T HUB $59
16 PORT 10BASE-T HUB $118
18 PORT 10BASE-T HUB $149
8 PORT 10/100 BASE-T HUB $319
16 PORT FASE ETHERNET HUB $578
WINDOWS 95 .....$98
WINDOWS NT 4.0 WORKSTATION $139
WINDOWS NT 4.0 SERVER(5 USER) $398

UPGRADE SPECIAL:

UPGRADE ANY OF YOUR OLD PC TO
PENTIUM MMX 200MHz SYSTEM $278
PENTIUM MMX 233MHz SYSTEM $319
PENTIUM II LX440 233MHz SYSTEM.....$498
PENTIUM II LX440 266MHz SYSTEM.....$589
* PENTIUM MMX TXPRO SYSTEM BOARD
* PENTIUM II LX440 SYSTEM BOARD
* 512KB PIPELINE CACHE
* 16MB RAM FOR MMX SYSTEM
* 32MB SDRAM FOR PII SYSTEM
* BUILT-IN S3 VIRGE PCI SVGA CARD
* AGP 4MB S3 3D ACCELERATED SVGA (PII)
* ESS 3D STEREO SOUND CARD
* USB/AGP/PSII/HIGH SPEED I/O PORTS
* MINI TOWER CASE W/250W PS
* MID TOWER CASE FOR PII SYSTEM W/PS

COMPUTER SOURCE

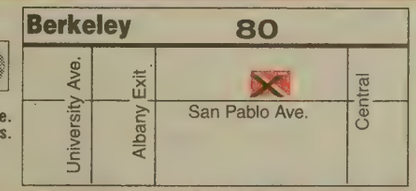
COMPUTER SYSTEM & NETWORK TECHNOLOGY

VISA · MasterCard

Prices subject to change without notice.
Not responsible for typographical errors.

(510)526-7733 • FAX: (510)526-7723 WWW.CSNTECH.COM

518 San Pablo Avenue, Albany, CA 94706 M-F 10-7 SAT. 10-5



Government, Corporate, and School POs Welcome!

advertiser•by•cityindex

For your convenience, here is a list of advertisers by county and city. Please see the advertiser index on page 212 for an alphabetical listing.

Alameda County

Alameda
Future Computing Solutions 57
Host Pro 18Q

Albany
Computer Source 219
DJ Computers 83
Host Pro 18Q
PC Ten 117
UMiracle MicroSystems 206–209

Berkeley
D Net Computers 4
Hi-Tech USA 213–217
Host Pro 18Q
Laitron Computer 100–105
M.A.C. 125

Dublin
Comtek Computer 95
Host Pro 18Q

Emeryville
Host Pro 18Q

Fremont
A&A Technology 97
Abit Computer Corporation 26, 27
Acme Microsystems 218
America Computers 85
Arescom 37
BG Computers 81
Bold Data 18H, 18I
Central Computer 52, 60–69
CLS, Inc. 14
Computer Renaissance 42
Cypress Computers 31
Cyrix 2K
D Net Computers 4
Golden Micro Computers 91
Greenleaf Distribution 26, 27
Host Pro 18Q
Hypersurf 145
J&K Technology 75
Laitron Computer 100–105
MDI Technology 21
Media On 18B, 18C
Network Associates 151
New River 115
Sampo 2L
UMiracle MicroSystems 206–209
USM Distributors 115
U-tron 18D–18G
Variant Microsystems 173
WeirdStuff Software 79

Hayward
Chem USA Corporation 2J
CyberVision 2B
D Net Computers 4
Host Pro 18Q
PC Doctor 22
T-Zone Corporate Research 51

Newark
Chem USA Corporation 2J

Oakland
Domino Computer 77
Host Pro 18Q
In Reach 18, 18A
PC Ten 117

Pleasanton
Diamond Lane 144
D Net Computers 4
Host Pro 18Q
Laitron Computer 100–105
NCAL Computer Source 158, 159

Union City
Granite Digital 46
Host Pro 18Q

Contra Costa County

Concord
AIM Computers 122
Host Pro 18Q
Value-Net Internet 181

El Cerrito
Host Pro 18Q
Perfect Solutions Multimedia 161

Lafayette
EDC Systems 78
Host Pro 18Q

Pleasant Hill
Computer Renaissance 42
Computown 29
Host Pro 18Q
Laitron Computer 100–105

Richmond
Evergreen Computer 146–147
Host Pro 18Q

Walnut Creek
CompuMart 153
Host Pro 18Q
Value Net 181
Verio N. CA. 150

Marin County

Mill Valley
Host Pro 18Q
Marketpro Shows 178

Novato
BCSA Computers 107
Computown 29
Host Pro 18Q

San Anselmo
HiQ Systems 18M
Host Pro 18Q

San Rafael
D Net Computers 4
Hi-Q Systems 18M
Host Pro 18Q
Marin Computer Resource Center 18J, 18K

Sacramento County

Sacramento
D Net Computers 4
Evernet Education Services 160
Halted Specialties 73
Hi-Q Systems 18M
Host Pro 18Q
In Reach 18, 18A
JPS.Net 18N
Smart Page 40

San Francisco County

San Francisco
9 Net Avenue 2E
A&A Technology 97
Beta Nineties 8
Central Computer System 52, 60–69
Computer Learning Center 42
Computer Renaissance 42
Computown 29
CPU & Memory Exchange Club 135
D Net Computers 4
Decaview 2F, 2G, 18O
Evernet Education 160
Hi-Tech USA 213–217
Host Pro 18Q
IDT Winchip C6 ....2I
InReach Internet 18, 18A
ITS CD 46
K Square Computers 47
MacByte 137
MicroGate 212
Microsoft 2C
Sampo 2L
Sceptre 2A, C3
Slip.Net 7
Starlite Electronics 86, 87
Sweet Memory 15
UMiracle 206–209
USM Systems 115
Westech Micro 212

San Joaquin County

Stockton
Hi-Q Systems 18M
Host Pro 18Q

San Mateo County

Belmont
Belmont Systems 126, 127
Host Pro 18Q

Burlingame
Decaview 2F, 2G, 18O
Host Pro 18Q
Robert Austin Corporation 177

Daly City
D Net Computers 4
Host Pro 18Q

Foster City
Host Pro 18Q
Laitron Computers 100–105
Starlite Electronics 86, 87

Millbrae
Domino Computer Self Service Centers 77
Host Pro 18Q
Laitron Computer 100–105

Redwood City
Host Pro 18Q
Netis Technology 149

San Carlos
Belmont Systems, Inc. 126, 127
Host Pro 18Q

San Mateo
Hi-Tech USA 213–217
Host Pro 18Q

South San Francisco
FastLink 89
Host Pro 18Q
Mactica 76
Polywell Computers 16, 17
Universal Network Products 141
USM Distributors 115

Santa Clara County

Campbell
Cybertek Computer 162
Domino Comp. 77
Host Pro 18Q

Cupertino
Concentric Network 2H
Host Pro 18Q
Lex Micro 157
Sceptre 2A, C3

Los Altos
D Net Computers 4
Host Pro 18Q
IQ INFoQuest Computer 44, 45

Menlo Park
Hi-Tech USA 213–217
Host Pro 18Q

Milpitas
American Multi Systems 168
Appro International 18P
A.R.T. Multimedia Systems 121
Besq Systems 12, 13
D Net Computers 4
Golden Valley Systems 99
Hi-Tech USA 213–217
Host Pro 18Q
Linden Micro Tech 142, 143
Netis Technology 149
Proven Technology 41, 178
Sceptre 2A, C3
Supercom C2, C3
World Net Microsystems 210, 211

Mt. View
Arise Computers 49
Computown 29
Cyrix 2K
Host Pro 18Q

Palo Alto
Disk Drive Depot 3
Host Pro 18Q
Palo Alto Micro 145

San Jose
9 Net Avenue 2E
Acer Factory Outlet 18
AMT International 116
Bay Area Micro 109–111
Benitek Computers 71
BG Computers 81
Century Graphics 32
Chicotec 54
CKNS Internet 139
Computer Renaissance 42
Computer System Outlet 24
Computer Xtras Xpress 76
Computown 29
CyberVision 2B
D Net Computers 4
Decaview 2F, 2G, 18O
For U Computers 56
Host Pro 18Q
IDT Winchip C6 ....2I
Laitron Computers 100–105
Memory World 80
Meridian Computer Systems 113
MIC Computer 5
Microsoft 2C
Micro Sonic Computer 19
Pixel/USA 184, 185
RIX Technology 18L
Sampo 2L
Silicon Valley Square 174
Siliconrax 2D
YNN 175

Santa Clara
Abit Computer Corporation 26, 27
Alpha Telecom, Inc. 88
BG Computers 81
Callan Corp. 133, 139
CeLAN Technology 130
Central Computer 52, 60–69
Computer Express 55
Comtek Computer 95
CPU & Memory Exchange Club 135
Cypress Computer 31
Cyrix 2K
D Net Computers 4
Edimax Computer 35, 156
Fortune Micro 120
Greenleaf Distribution 26, 27
Halted Specialities 73
HD Computer 34
Hitron Systems 166, 167
Host Pro 18Q
Iconix Computer 174
IDT Winchip C6 ....2I
Kingstar Computer 9, 148
Micro Sonic Computer 19
Mini Micro Supply 26, 27, 33
Verio N. CA. 150

Sunnyvale
9 Net Avenue 2E
Aroma Computer 118, 119
BG Computers 81
CyberVision 2B
Disk Drive Depot 3
D Net Computers 4
Hi-Q Systems 18M
Hi Tech USA 213–217
HKG Computers 129
Host Pro 18Q
Legend Computer 25
Microsoft 2C
Network Associates 151
Siliconrax 2D
T-Zone Corporate Research 51
United Microsystems 39
USM Systems 115
Weird Stuff Warehouse 79

Santa Cruz County

Santa Cruz
Host Pro 18Q

Solano County

Vallejo
D Net Computers 4
Host Pro 18Q

Sonoma County

Cotati
Halted Specialities 73
Host Pro 18Q

Santa Rosa
Domino 77
Host Pro 18Q

Southern California
9 Net Avenue, LA 2E
AAA Media 50
Compu D 134, 179, 188
CyberVision, Walnut 2B
Cyrix, City of Industry 2K
Electriciti 18T
Evernet Education 160
Future Computing Solutions 57
Host Pro 18Q
IDT Winchip C6 ....2I
Input Automation, Torrance 23
MacByte 137
Microsoft 2C
Mini Micro Supply, City of Industry, Irvine 26, 27, 33
Sceptre, City of Industry 2A, C3

Stanislaus County

Modesto
Aroma Computer 118, 119
Host Pro 18Q

Out of State
9 Net Avenue, East Rutherford, NJ 2E
Microsoft, Redmond, WA 2C
Sampo, Norcross, GA 2L

SONOMA COUNTY
NAPA COUNTY
To NAPA
VACAVILLE
FAIRFIELD
SUISUN
SOLANO COUNTY
MARIN COUNTY
NOVATO
San Pablo Bay
VALLEJO
CROCKETT
BENICIA
HERCULES
PINOLE
MARTINEZ
SAN ANSELMO
SAN RAFAEL
SAN PABLO
EL SOBRANTE
BAY POINT
PITTSBURG
ANTIOCH
RICHMOND
PLEASANT HILL
CONCORD
CLAYTON
MILL VALLEY
TIBURON
MARINA BAY
EL CERRITO
ALBANY
BERKELEY
ORINDA
LAFAYETTE
WALNUT CREEK
BRENTWOOD
EMERYVILLE
CONTRA COSTA COUNTY
OAKLAND
MORAGA
DANVILLE
SAN FRANCISCO
ALAMEDA
CASTRO VALLEY
SAN RAMON
DALY CITY
SOUTH SAN FRANCISCO
SAN LEANDRO
TO STOCKTON
MILLBRAE
BURLINGAME
San Francisco Bay
HAYWARD
DUBLIN
PLEASANTON
LIVERMORE
SAN MATEO
FOSTER CITY
BELMONT
UNION CITY
SUNOL
SAN CARLOS
REDWOOD CITY
FREMONT
NEWARK
ALAMEDA COUNTY
PALO ALTO
LOS ALTOS
MILPITAS
SAN MATEO COUNTY
MOUNTAIN VIEW
SANTA CLARA
SAN JOSE
SANTA CLARA COUNTY
SUNNYVALE
CUPERTINO
CAMPBELL
LOS GATOS
Marine World Pkwy
Redwood Rd.
Lake Herman Rd.
Columbus Pkwy
Pinole Valley Rd.
Alhambra Valley Rd.
Castro Ranch
San Pablo Dam Rd.
Gregory Ln.
Bear Creek
Wildcat Can Rd
Camino Pablo
Moraga Way
Rheem Blvd.
Canyon Rd.
Broadway
Bay Bridge
Golden Gate Bridge
Richmond-San Rafael Bridge
Skyline Blvd.
Redwood Rd.
Grow Canyon Rd.
Bollinger Canyon Rd.
Crow Canyon Rd.
Dublin Blvd.
Tassajara Rd.
Camino Tassajara
Alcosta Blvd.
San Ramon Valley Blvd.
Highland Rd.
Foothill Blvd.
Hesperian Blvd.
Industrial Blvd.
Jackson St.
Davis
Marina Blvd.
E. 14
Paloma Rd.
Stone Ridge
Stanley Blvd.
Portola
Sunol Blvd.
E. Vineyard Ave.
Vallecitos Rd.
Niles Canyon Rd.
Mission Blvd.
Union City Blvd.
Alvarado
Alvarado-Niles
Fremont
Thornton Ave.
Mowry Ave.
Stevenson Blvd.
Washington Blvd.
Warm Springs
Nimitz Fwy
Calaveras Rd.
San Mateo Bridge
Dumbarton Bridge
El Camino Real
Stevens Creek Blvd.
Stevens Can. Rd.
Saratoga-Sunnyvale Rd.
Guadalupe Pkwy
Lake Herman Rd.
Glen Cove
Springs Rd.
Travis Blvd
Air Base Pkwy
Peabody Rd.
Alamo Dr.
Nut Tree
Zimira
Rio Vista Rd.
Willow Pass Rd.
Pacheco Blvd.
Alhambra Ave.
Morello Ave.
San Pablo Ave.
Rilliton Dr.
Arlen Dr.
Willow Pass Rd.
Bailey Rd.
W. Leland
Railroad Ave.
Loveridge
Buchanan
Somersville
Kirker Pass Rd.
Clayton Rd.
Treat Blvd.
Ygnacio Valley Rd.
Marsh Creek Rd
Morgan Territory Rd.
Lone Tree Way
Taylor Rd.
Olympic Blvd.
Camino Pablo
Broadway
Harrison St.
Market St.
Telegraph Ave.
Shattuck Ave.
Adeline St.
Martin Luther King Jr. Way
Foothill Blvd.
Seminary Ave.
Mountain Blvd.
98th Ave.
Hegenberger Rd.
Edes Ave.
Doolittle Dr.
Oakport St.
Coliseum Way
Fruitvale Ave.
High St.
Mandela Pkwy
Peralta Blvd.
Fruitvale Ave.
Foothill Blvd.
Seminary Ave.
Mountain Blvd.
Tassajara Rd.
N. Livermore Ave.
Vasco Rd.
Portola
Ridge
Stone
Foothill Rd.
Palomares Rd.
Sunol Blvd.
E. Vineyard Ave.
Vallecitos Rd.
Niles Canyon Rd.
Mission Blvd.
Union City Blvd.
Alvarado
Alvarado-Niles
Fremont
Thornton Ave.
Mowry Ave.
Stevenson Blvd.
Washington Blvd.
Warm Springs
Nimitz Fwy
Calaveras Rd.
Dumbarton Bridge
El Camino Real
Stevens Creek Blvd.
Stevens Can. Rd.
Saratoga-Sunnyvale Rd.
Guadalupe Pkwy
Lake Herman Rd.
Glen Cove
Springs Rd.
Travis Blvd
Air Base Pkwy
Peabody Rd.
Alamo Dr.
Nut Tree
Zimira
Rio Vista Rd.
Willow Pass Rd.
Pacheco Blvd.
Alhambra Ave.
Morello Ave.
San Pablo Ave.
Rilliton Dr.
Arlen Dr.
Willow Pass Rd.
Bailey Rd.
W. Leland
Railroad Ave.
Loveridge
Buchanan
Somersville
Kirker Pass Rd.
Clayton Rd.
Treat Blvd.
Ygnacio Valley Rd.
Marsh Creek Rd
Morgan Territory Rd.
Lone Tree Way
Taylor Rd.
Olympic Blvd.
Camino Pablo
Broadway
Harrison St.
Market St.
Telegraph Ave.
Shattuck Ave.
Adeline St.
Martin Luther King Jr. Way
Foothill Blvd.
Seminary Ave.
Mountain Blvd.
98th Ave.
Hegenberger Rd.
Edes Ave.
Doolittle Dr.
Oakport St.
Coliseum Way
Fruitvale Ave.
High St.
Mandela Pkwy
Peralta Blvd.
Fruitvale Ave.
Foothill Blvd.
Seminary Ave.
Mountain Blvd.
Tassajara Rd.
N. Livermore Ave.
Vasco Rd.
Portola
Ridge
Stone
Foothill Rd.
Palomares Rd.
Sunol Blvd.
E. Vineyard Ave.
Vallecitos Rd.
Niles Canyon Rd.
Mission Blvd.
Union City Blvd.
Alvarado
Alvarado-Niles
Fremont
Thornton Ave.
Mowry Ave.
Stevenson Blvd.
Washington Blvd.
Warm Springs
Nimitz Fwy
Calaveras Rd.
Dumbarton Bridge
El Camino Real
Stevens Creek Blvd.
Stevens Can. Rd.
Saratoga-Sunnyvale Rd.
Guadalupe Pkwy
29
37
80
680
12
780
4
580
80
24
680
13
580
185
580
238
880
92
280
84
680
880
101
237
680
280
85
101

Old Wish Lists Never Die

Or, The More Things Change the More They Stay The Same

By John C. Dvorak

Every four or five years I put together a wish list. This is not a common wish list because my wish list includes things I wish would go away. I dug up an old list from seven years ago to see if anything has been improved. And, more obviously, to see if my wishes came true. Let's go over the wishes of seven years ago and the current status. Let me tell you in advance, it's pathetic how slowly things change.

Wish List For Things

Wish #1. Seven years ago: "Language translators that work. As the world goes international, the need for accurate computer translation will be paramount. Hopefully it will someday evolve into devices you can talk into and out will come a clear translation of what you've said. This is the kind of device that will be the true use of voice recognition. Unfortunately the drawback is that voice recognition seems a long way off and the computer has difficulty correcting bad English and making it into good English let alone translate something into Russian."

Wish #1. Today: Voice recognition hasn't improved much and translation software is still laughable. Gads! Proof that nothing changes.

Wish #2: Seven years ago: "Smart word processors. This is a word processor that would incorporate a spell checker and usage checker right into the system so it would automatically correct mistakes you, the user, make over and over. I, for example, because of typing habits, have a tendency to type 'liek' instead of 'like.' It's just a coordination problem. There are other common typos I make over and over. While the spell checker catches these it could as easily be caught before spell checking and corrected automatically. Certain common grammatical bloopers could be handled as easily."

Wish #2: Today: We've come pretty close with this wish. The grammar aspect of word processors is still lagging though.

Wish #3. Seven years ago: "How about ISDN (integrated services digital network)? ISDN has been in the planning stages for the phone companies for years and years. These bozos don't know what to do with ISDN. In some areas you can order some ISDN service, but it's isolated."

Wish #3. Today: Things haven't changed much in seven years. You can get ISDN but its over-priced and a pain to install and still not fast enough.

Wish #4. Seven years ago: "OCR that works 100% of the time and can read bound books. Today's OCR programs are better than nothing—barely. OCR still isn't close enough to perfection to be acceptable. If I can read a broken bent "t" as a "t" then an OCR program should be able to read it too. These programs do a fine job of reading perfectly typeset helvetica and little else. The books and manuscripts of the world are all going to have to be digitized someday and OCR is going to have to do it. Let's hope it's soon."

Wish #4. Today: It amuses me how OCR suddenly became important in everyone's mind and the quality improved dramatically years ago and then very little has changed. It still has problem with broken t's. Kurzweil made a cool scanner that scanned to the edge specifically to read books but then took it off the market. Now there is nothing.

Wish They Would Go Away List

Well these wishes were a typical disappointment. Let's examine the wishes I made for things I wanted to go away!

Wish #1. Seven years ago: "Mapping programs for marketeers. I first saw one of these things years ago and hooted then. A guy took me into his back room and showed me how a spreadsheet linked to this mapping program could turn California blue and Nevada red to reflect widget sales. How many people need such a program I asked. 'Everyone!' He said."

Wish #1. Today: Sheesh, why did I even care to wish it would go away. Thinking back there apparently were a slew of such programs coming out all at once. I was sick of seeing them. Needless to say the trend ended and whatever was bothering me actually went away! Cool!

Wish #2 Seven years ago: "More icons. Is it just me or has everyone gone icon mad?"

Wish #2. Today: This is another mystery. Why did I care? Nowadays, I can't find any good icons. Apparently this annoyance disappeared too! Now I want more icons. I must not be alone regarding these issues.

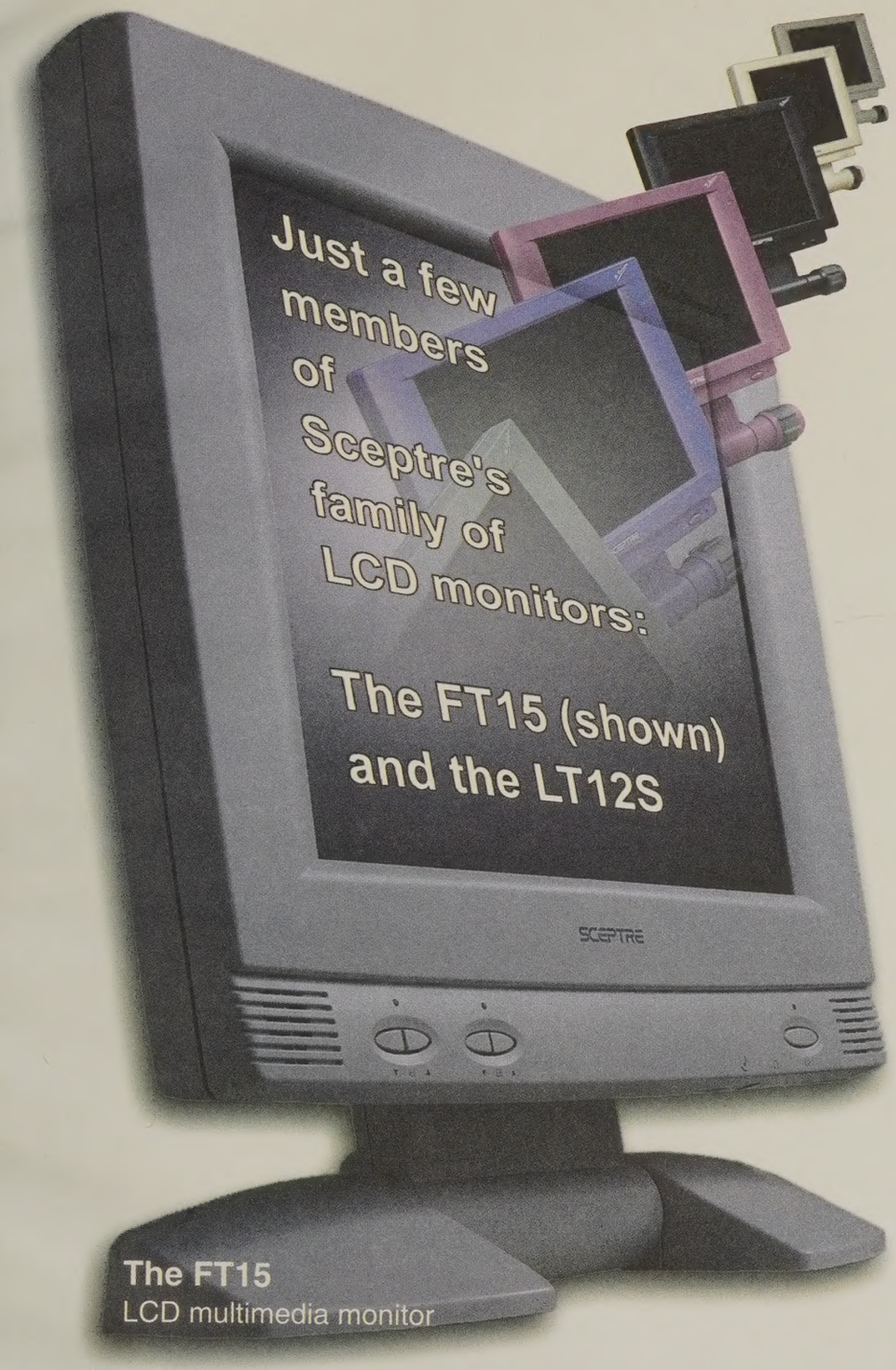
Wish #3. Seven years ago: "Palmtop computers. Sorry, but I still don't get the appeal of palmtops. You can't read the screens. You can't type on them. If you're a man and put one in your jacket breast pocket you look like you've grown a mammary gland. Besides that I don't like carrying around all my personal information in such a convenient pickpocketable package."

Wish #3. Today: Well, as a dedicated user of the Palm Pilot, I wonder what was I thinking? Then again these older devices were big, the screens were terrible; they didn't deliver on their promises and the software wasn't good. Times change.

There is a certain theme to these kinds of wish lists. Things you want to happen take longer than they should. This is a lesson for people who like to think that things will change overnight because of a new technology. On the other hand things that you wish would go away because they are dumb usually DO go away because the public doesn't buy dumb products. Finally things that are simply executed wrong, but may actually have a good concept lurking beneath the surface (Palm Pilot) tend to keep coming back over and over in various forms until it catches on. For instance, since # 3 of the "wish they would go away" wishes revolves around a device I now like and enjoy, you sometimes have to wonder what all the complaining was about. Apparently I was complaining about the execution not the concept or the ideas behind the devices. The great thing about being a technology writer for nearly 20 years allows me to examine my old thought process and fine tune it for the next "wish list." Coming soon in a magazine near you. ◆

Copyright © 1998 by John C. Dvorak. All rights reserved.

$1999



The FT15
LCD multimedia monitor

1024 x 768 resolution
14.5" diagonal view
Amplified stereo speakers
2.5" thin (without base)
7.5 lb. light (without base)
Easily detached base
(FT15 also available in charcoal gray)

For more information check out
Sceptre's web site at
WWW.SCEPTRE.COM

Visit Sceptre's Booth
At PC Expo, Booth # 2954 June 16-18, 1998. At Comdex Canada, Booth # 830 July, 8-10, 1998

LCD flat panel technology just became affordable for everyone!

FT15 — only $1199 MSRP (US)

Only Sceptre®, the people who introduced multimedia flat panel technology, could bring you pricing this outrageous!

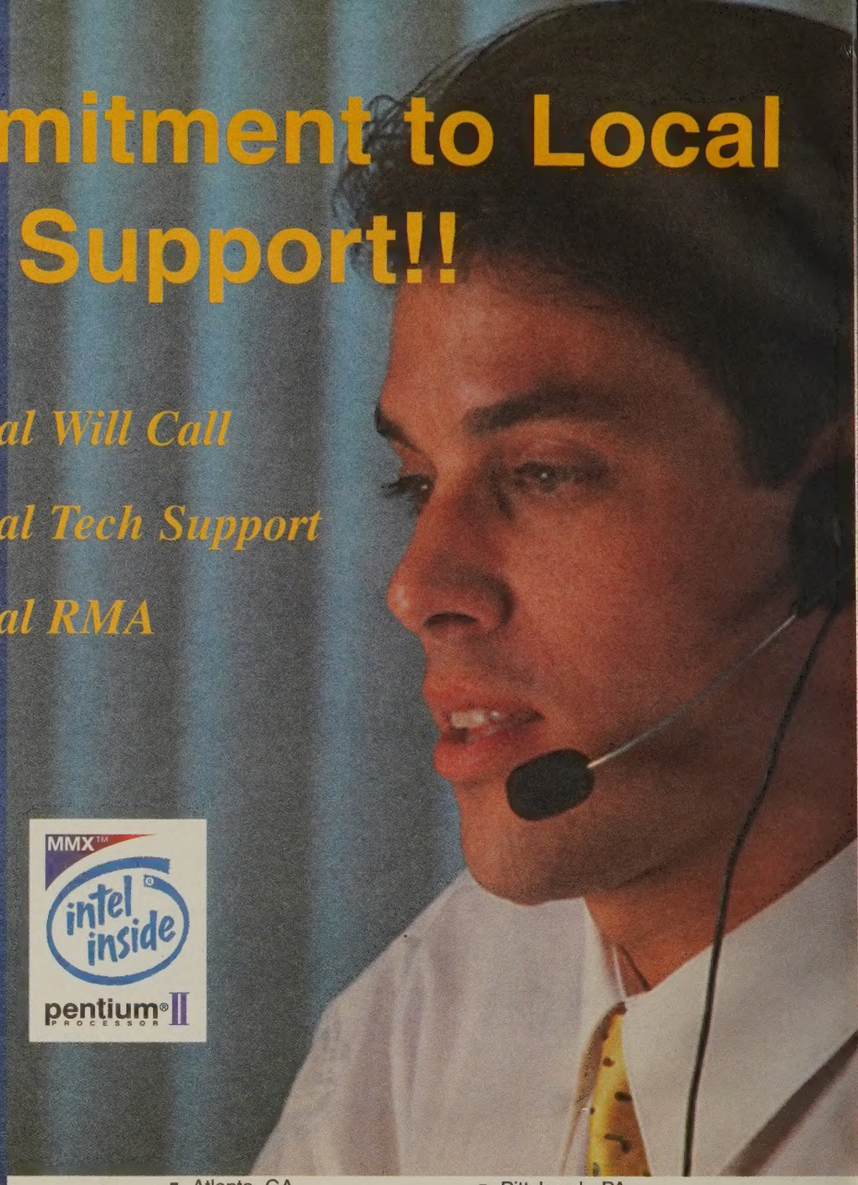
So get that big hulking CRT off of your desktop and reclaim real estate you thought was gone forever!

Call 1-888-LCD-FT15 for corporate discounts and a dealer near you!

SCEPTRE®
The First, The Best, The Only

Supercom...Commitment to Local Customer Support!!

- *Local Will Call*
- *Local Tech Support*
- *Local RMA*



Supercom is your *local* PC components distributor and manufacturer of custom computer systems.

TOUCH 400 Series Systems

Featuring Intel® Pentium® Processors with MMX™ Technology

TOUCH 500 Series Systems

Featuring Intel Pentium II Processors

TOUCH 600 Series Systems

Featuring Intel Pentium II Processors

TOUCH Enterprise Systems

Server Solutions, we built ours, let us build yours!

- Atlanta, GA
- Boston, MA
- Buffalo, NY
- Chicago, IL
- Cleveland, OH
- Columbus, OH
- Dallas, TX
- Denver, CO
- Houston, TX
- Kansas City, KS
- Miami, FL
- Minneapolis, MN
- Edison, NJ
- Phoenix, AZ
- Pittsburgh, PA
- Portland, OR
- San Antonio, TX
- San Diego, CA
- San Jose, CA
- Salt Lake City, UT
- Seattle, WA
- Vienna, VA
- Toronto
- Vancouver
- Montreal
- London, England
- Beijing, China

...and growing!

Call your local Supercom office at

1-800-888-1888

www.supercom.com

ISO 9002 Certified

Supercom

The Intel Inside Logo and Pentium logos are registered trademarks and MMX is a trademark of Intel Corporation. All other product and company names are the trademarks or registered trademarks of their respective companies.